MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

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S. D. Booth

TRANSACTIONS

OF THE

MEDICAL SOCIETY

OF THE

STATE OF NORTH CAROLINA.

FIFTY-FOURTH ANNUAL MEETING

HELD AT

Morehead City, N. C., June 11, 12 and 13, 1907.

PRESIDENT, DR. SAMUEL D. BOOTH, OXFORD, N. C.
SECRETARY, DR. DAVID A. STANTON, HIGH POINT, N. C.

(Edited for the Society by David A. Stanton, High Point, N. C.)

RALEIGH:
EDWARDS & BROUGHTON PRINTING CO.
1907.

Publication Committee,*

DR. D. A. STANTON.....High Point
DR. E. C. REGISTER.....Charlotte
DR. W. H. WAKEFIELD .....Charlotte

"It is to be uuderstood that the Society is not to be considered as endorsing all the views and opinions of authors of papers published in the transactions of the Society."—*Extract from By-Laws, chap.* 10, *sec.* 8.

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*The volume of Transactions of the 1907 session at Morehead City was prepared and issued under the editorial supervision of the Secretary of that meeting.

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An Explanation and Apology to the Medical Society of the State of North Carolina.

High Point, N. C., November 18, 1907.

One week before going to Morehead City, session of the State Meeting, I wired Dr. J. M. Parrott to secure a stenographer to take the proceedings of said meeting. Two days before time to go to Morehead City I had a wire telling me that he could not secure a stenographer for this duty. I employed one in High Point, who had the reputation for correct work, having served as court reporter.

Soon after returning from the meeting I asked the gentleman to put his notes in writing that I might correct any errors at my leisure; he said he would at once. Time went on, and I asked him again and again for the proceedings; he always answered that he would attend to the work at once. I waited till November 15, all the time pressing him to give me the work. Promises were all I got, and practically all the proceedings of that session will never be seen in print. I regret this failure more than any other member of the State Society, but it has proven beyond my power to have the resolutions, discussions, etc., reproduced, and as I send the papers which were read, and the proceedings of the House of Delegates to the printer, it is with the feeling that I have been a failure as your Secretary this, my first year.

D. A. Stanton.

ROSTER OF OFFICERS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM ORGANIZATION TO 1907.

	Date.	Place.	Members in Attendance.	President.	Vice-Presidents.	Secretary.	Treasurer.	Members on Roll. *	Honorary Members. *	Honorary Fellows. *
	1849	Raleigh	25	F. J. Hill		W. H. McKee		25		
1	1850	Raleigh	21	Edmund Strudwick	F. J. Haywood, C. E. Johnson, J. E. Williamson, W. G. Thomas.	W. H. McKee	W. G. Hill	38	9	
2	1851	Raleigh	23	Edmund Strudwick	C. E. Johnson	W. H. McKee	W. G. Hill	46	9	
3	1852	Wilmington	38	J. E. Williamson	Thomas N. Cameron, William G. Hill, Johnston B. Jones, N. J. Pittman.	E. B. Haywood	J. J. W. Tucker	72	12	
4	1853	Fayetteville	24	J. E. Williamson	W. G. Hill, Johnston B. Jones, J. B. G. Myers, N. J. Pittman.	W. W. Harris	Daniel Dupree	80	14	
5	1854	Raleigh	37	J. H. Dickson	N. J. Pittman, J. B. G. Myers, J. Graham Tull, A. D. McLean.	S. S. Satchwell	Daniel Dupree	84	17	
6	1855	Salisbury	23	J. H. Dickson	J. Graham Tull, Owen Hadley, A. D. McLean, Hugh Kelly.	S. S. Satchwell	J. B. Dunn	96	18	
7	1856	Raleigh	37	C. E. Johnson	Marcellus Whitehead, E. R. Gibson, Johnston B. Jones, O. F. Manson.	S. S. Satchwell	J. B. Dunn	101	22	
8	1857	Edenton	35	C. E. Johnson	Marcellus Whitehead, O. F. Manson, H. W. Faison, E. T. Gibson.	W. G. Thomas	J. B. Dunn	113	16	
9	1858	New Bern	69	W. H. McKee	Edward Warren, C. W. Graham, Caleb Winslow, A. B. Pierce.	W. G. Thomas	J. B. Dunn	172	18	
10	1859	Statesville	81	W. H. McKee	James G. Ramsay, P. E. Hines, J. R. Mercer, W. T. Howard.	W. G. Thomas	C. W. Graham			
11	1860	Washington	64	N. J. Pittman	P. T. Henry, R. H. Winborne, M. Whitehead, T. S. Leach.	W. G. Thomas	C. W. Graham	233	18	
12	1861	Morganton	23	N. J. Pittman	J. J. Summerell, C. T. Murphy, G. W. Hodges, W. A. B. Nercom.	W. G. Thomas	C. W. Graham	244	18	
13	1866	Raleigh	20	J. J. Summerell		W. G. Thomas	C. W. Graham			
14	1867	Tarboro	41	W. G. Thomas	E. Burke Haywood, R. H. Winborne, W. L. Barrow, J. W. Jones.	S. S. Satchwell	C. W. Graham	228	11	
15	1868	Warrenton	27	S. S. Satchwell	Hugh Kelly, George E. Foote, Charles J. O'Hagan, J. H. Baker.	Thomas F. Wood	J. W. Jones			
16	1869	Salisbury	36	E. Burke Haywood	Thomas E. Wilson, A. B. Pierce, C. T. Murphy, M. A. Locke.	Thomas F. Wood	J. W. Jones			

* Missing data not to be found in records.

17	1870	Wilmington	38	C. J. O'Hagan	E. A. Anderson, F. N. Lucky, W. R. Sharpe, R. L. Payne.	Thomas F. Wood	J. W. Jones		
18	1871	Raleigh	35	Hugh Kelly	D. N. Patterson, R. C. Pearson, J. B. Seavy, G. L. Kirby.	Thomas F. Wood	J. W. Jones		
19	1872	NewBern	34	W. G. Hill	H. W. Faison, R.I. Hicks, G. H. Macon, W. A. B. Norcom.	James McKee	J. W. Jones		
20	1873	Statesville	43	M. Whitehead	W. T. Ennett, William Little, Charles Duffy. T. P. Jerman.	James McKee	H. T. Bahnson		
21	1874	Charlotte	56	W. A. B. Norcom	J. B. Jones, R. F. Lewis, C. G. Cox, J. L. Knight.	James McKee	H. T. Bahnson	126	5
22	1875	Wilson	60	J. W. Jones	Walter Debnam, J. A. Gibson, Wm. Little, D. N. Patterson.	James McKee	H. T. Bahnson	148	5
23	1876	Fayetteville	33	Peter E. Hines	Joseph H. Baker, G. G. Smith, T. D. Haigh, J. K. Hall.	James McKee	H. T. Bahnson	157	4
24	1877	Salem	42	George A. Foote	J. K. Hall, B. W. Robinson, A. Holmes, A. A. Hill.	James McKee	A. G. Carr	177	4
25	1878	Goldsboro	79	R. L. Payne	E. M. Rountree, Richard Anderson, S. B. Flowers, L. A. Stith.	L. J. Picot	A. G. Carr	194	6
26	1879	Greensboro	109	Charles Duffy, Jr	J. A. Gibson, Willis Alston, James McKee, A. A. Hill.	L. J. Picot	A. G. Carr	198	6
27	1880	Wilmington	105	J. F. Shaffner	J. K. Hall, W. C. McDuffie, W. R. Wilson, R. F. Lewis.	L. J. Picot	A. G. Carr	225	6
28	1881	Asheville	92	R. B. Haywood	J. A. McRee, W. H. Lilly, R. H. Speight, W. J. H. Bellamy	L. J. Picot	A. G. Carr	254	6
29	1882	Concord	65	Thomas F. Wood	T. J. Moore, D. J. Cain, S. E. Evans, John McDonald.	L. J. Picot	A. G. Carr	297	7
30	1883	Tarboro	112	J. K. Hall	A. W. Knox, J. M. Hadley, E. S. Foster, John Whitehead.	L. J. Picot	A. G. Carr	310	7
31	1884	Raleigh	112	A. B. Pierce	F. W. Potter, G. W. Graham, R. Dillard, G. W. Long.	L. J. Picot	A. G. Carr	348	7
32	1885	Durham	173	W. C. McDuffie	James McKee, T. E. Anderson, W. H. Whitehead, A. G. Carr.	W. C. Murphy	R. L. Payne, Jr	424	6
33	1886	NewBern	113	Joseph Graham	H. T. Bahnson, L. J. Picot, J. L. McMillan, W. W. Faison.	J. M. Baker	R. L. Payne, Jr	438	7
34	1887	Charlotte	112	H. T. Bahnson	G. G. Smith, J. L. Nicholson, C. M. Poole, H. B. Ferguson.	J. M. Baker	R. L. Payne, Jr	452	7
35	1888	Fayetteville	133	T. D. Haigh	W. P. Ennett, J. A. Dunn, T. E. Anderson.	J. M. Baker	C. M. Poole	396	6
36	1888	Ellzabeth City	50	W. T. Ennett	W. J. Jones, S. W. Stevenson, G. W. Long.	J. M. Baker	C. M. Poole	410	6
37	1890	Oxford	160	G. G. Thomas	R. L. Payne, Jr.. Richard Dillard, S. W. Booth.	J. M. Hays	C. M. Poole	414	6
38	1891	Asheville	135	R. H Lewis	S. W. Battle, J. L. Nicholson. W. H. Lilly.	J. M. Hays	C. M. Poole	422	6

* Missing data not to be found in records.

ROSTER OF NORTH CAROLINA MEDICAL SOCIETY—Continued.

	Date.	Place.	Members in Attendance.	President.	Vice-Presidents.	Secretary.	Treasurer.	Members on Roll.*	Honorary Members *	Honorary Fellows. *
39	1892	Wilmington	162	W. T. Cheatham	T. S. Burbank, J. W. Long, W. H. H. Cobb, W. D. Hilliard.	J. M. Hays	C. M. Poole	431	6	----
40	1893	Raleigh	221	J. W. McNeill	W. C. Galloway, H. H. Harris, J. M. Hadley, Thomas Hill.	R. D. Jewett	M. P. Perry	447	6	3
41	1894	Greensboro	166	W. H. H. Cobb	J. A. Hodge, R. W. Tate, Willis Alston, M. H. Fletcher.	R. D. Jewett	M. P. Perry	454	5	3
42	1895	Goldsboro	------	J. H. Tucker	J. Howell Way, W. H. Harrell, O. McMullan, C. A. Misenheimer.	R. D. Jewett	M. P. Perry	436	7	3
43	1896	Winston-Salem	158	R. L. Payne	S. D. Booth, J. P. Monroe, J. A. Burroughs, J. E. Grimsley.	R. D. Jewett	M. P. Perry	452	7	3
44	1897	Morehead City	103	P. L. Murphy	J. C. Walton, A. A. Kent, M. R. Adams, B. L. Long.	R. D. Jewett	M. P. Perry	406	6	3
45	1898	Charlotte	------	Francis Duffy	E. C. Register, A. T. Cotton, J. B. H. Knight, F. H. Russell.	R. D. Jewett	M. P. Perry	437	6	21
46	1899	Asheville	152	L. J. Picot	I. W. Faison, J. W. White, H. H. Dodson, W. C. Brownson.	George W. Pressly	G. T. Sikes	489	6	16
47	1900	Tarboro	115	George W. Long	C. M. Poole, Jas. M. Parrott, T. B. Williams, W. D. Hilliard.	George W. Pressly	G. T. Sikes	482	6	21
48	1901	Durham	186	Julian M. Baker	M. H. Fletcher, C. A. Julian, D. A. Stanton, E. M. Summerell.	George W. Pressly	G. T. Sikes	515	5	18
49	1902	Wilmington	147	Robert S. Young	A. G. Carr, E. D. Dixon-Carroll, I. M. Taylor, J. M. Parrott.	George W. Pressly	G. T. Sikes	546	5	20
50	1903	Hot Springs	155	A. W. Knox	E. G. Moore, C. A. Julian, W. W. McKenzie, J. L. Nicholson.	J. Howell Way	G. T. Sikes	530	6	19
51	1904	Raleigh	326	H. B. Weaver	Jno. Hey Williams, John C. Rodman, S. F. Pfohl.	J. Howell Way	G. T. Sikes	1033	8	17
52	1905	Greensboro	361	David T. Tayloe	C. A. Julian, John T. Burrus, I. W. Faison.	J. Howell Way	G. T. Sikes	1175	8	17
53	1906	Charlotte	406	Edward C. Register	L. B. McBrayer, W. H. Cobb, Jr., W. O. Spencer.	J. Howell Way	G. T. Sikes	1234	8	16
54	1907	Morehead City	217	Samuel D. Booth	C. M. Strong, J. E. McLoughlin, W. F. Hargrave.	David A. Stanton	H. McKee Tucker	------	7	16

* Missing data not to be found in records.

PAST MEMBERS BOARD OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA.

Name and Post-office.	
* JAMES H. DICKSON, Wilmington	1859-1866
* Charles E. Johnson, Raleigh	1859-1866
* Caleb Winslow, Hertford	1859-1866
* Otis F. Manson, Townsville	1859-1866
* William H. McKee, Raleigh	1859-1896
* Christopher Happoldt, Morganton	1859-1866
* J. Graham Tull, New Bern	1859-1866
* SAMUEL T. IREDELL, Secretary	1859-1866
* N. J. PITTMAN, Tarboro	1866-1872
* E. Burke Haywood, Raleigh	1866-1872
* R. H. Winborne, Edenton	1866-1872
* S. S. Satchwell, Rocky Point	1866-1872
* J. J. Summerell, Salisbury	1866-1872
* R. B. Haywood, Raleigh	1866-1872
* M. Whitehead, Salisbury	1866-1868
J. F. Shaffner, Salem	1868-1872
* WILLIAM LITTLE, Secretary	1866-1872
* CHARLES J. O'HAGAN, Greenville	1872-1879
* W. A. B. Norcom, Edenton	1872-1878
* C. Tate Murphy	1872-1878
* George A. Foote, Warrenton	1872-1878
* J. W. Jones, Tarboro	1872-1878
* R. L. Payne, Lexington	1872-1878
CHARLES DUFFY, JR., New Bern	1872-1878
P. E. HINES, Raleigh	1878-1884
T. D. Haigh, Fayetteville	1878-1884
R. I. Hicks, Williamsboro	1878-1880
* George L. Kirby, Goldsboro	1878-1884
* Thomas F. Wood, Wilmington	1878-1884
Joseph Graham, Charlotte	1878-1884
H. T. BAHNSON, Salem	1878-1894
R. H. Lewis, Raleigh	1880-1884
* WILLIAM R. WOOD, Scotland Neck	1884-1890
A. W. Knox, Raleigh	1884-1890
Francis Duffy, New Bern	1884-1890
* P. L. Murphy, Morganton	1884-1890
Willis Alston, Littleton	1884-1890
W. J. H. BELLAMY, Wilmington	1884-1890
J. A. Reagan, Weaverville	1884-1890
R. L. Payne, Jr., Norfolk, Va	1890-1892
George W. Purefoy, Asheville	1890-1892
George G. Thomas, Wilmington	1890-1894
Robert S. Young, Concord	1890-1894
George W. Long, Graham	1890-1896
W. H. WHITEHEAD, Rocky Mount	1890-1896
L. J. PICOT, Littleton	1890-1896
JULIAN M. BAKER, Tarboro	1892-1898
H. B. Weaver, Asheville	1892-1898
† T. S. Burbank, Wilmington	1894-1898
* J. M. Hayes, Greensboro	1894-1897
D. T. TAYLOE, Washington	1896-1902
† R. H. Whitehead, Chapel Hill	1896-1897
THOMAS E. ANDERSON, Statesville	1896-1902
Kemp P. Battle, Raleigh	1897-1900
J. HOWELL WAY, Waynesville	1897-1902
W. H. H. Cobb, Goldsboro	1898-1900
Albert Anderson, Wilson	1898-1902
E. C. REGISTER, Charlotte	1898-1902
Thomas S. McMullan, Hertford	1900-1902
John C. Walton, Chase City, Va	1900-1902
† George W. Pressly, Charlotte	1902-1906

* Deceased. † Resigned.

NOTE.—The names of members who served as President appear in CAPS; of those who served as Secretary in SMALL CAPS.

BOARD OF MEDICAL EXAMINERS, 1902–1908.

A. A. KENT, President, Lenoir, Practice of Medicine.
G. T. SIKES, Secretary, Grissom, Chemistry and Pharmacy. Appointed in 1903; vice Dr. Pressly resigned.
CHARLES O'H. LAUGHINGHOUSE, Greenville, Obstetrics and Gynecology.
M. H. FLETCHER, Asheville, Physiology and Hygiene.
JAMES M. PARROTT, Kinston, Anatomy and Histology.
J. T. J. BATTLE, Greensboro, Materia Medica and Therapeutics.
FRANK H. RUSSELL, Wilmington, Surgery.

ROSTER OF MEMBERS NORTH CAROLINA STATE BOARD OF HEALTH, FROM ORGANIZATION IN 1877 TO 1907.

Name.	Address.	Appointed by	Term.
S. S. Satchwell, M. D., President	Rocky Point	State Society	1877 to 1878
Thomas F. Wood, M. D., Secretary	Wilmington	State Society	1877 to 1878
Joseph Graham, M. D	Charlotte	State Society	1877 to 1878
Charles Duffy, Jr., M. D	NewBern	State Society	1877 to 1878
Peter E. Hines, M. D	Raleigh	State Society	1877 to 1878
George A. Foote, M. D	Warrenton	State Society	1877 to 1878
S. S. Satchwell, M. D., President	Rocky Point	State Society	1878 to 1884
Thomas F. Wood, M. D. Secretary	Wilmington	State Society	1878 to 1884
Chas. J. O'Hagan, M. D., President	Greenville	State Society	1878 to 1882
George A. Foote, M. D	Warrenton	State Society	1878 to 1882
Marcellus Whitehead, M. D	Salisbury	State Society	1878 to 1880
R. L. Payne, M. D	Lexington	State Society	1878 to 1880
H. G. Woodfin, M. D	Franklin	Gov. Z. B. Vance	1878 to 1880
A. R. Ledeux, Chemist	Chapel Hill	Gov. Z. B. Vance	1878 to 1880
William Cain, Civil Engineer	Charlotte	Gov. Z. B. Vance	1878 to 1880
R. L. Payne, M. D	Lexington	State Society	1881 to 1887
Marcellus Whitehead, M. D., Pres	Salisbury	State Society	1881 to 1884
J. M. Lyle, M. D	Franklin	Gov. T. J. Jarvis	1881 to 1883
William Cain, Civil Engineer	Charlotte	Gov. T. J. Jarvis	1881 to 1883
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1881 to 1883
J. W. Jones, M. D., President	Wake Forest	State Society	1883 to 1889
John McDonald, M. D	Washington	State Society	1883 to 1889
S. H. Lyle, M. D	Franklin	Gov. T. J. Jarvis	1883 to 1885
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1883 to 1885
Arthur Winslow, Civil Engineer	Raleigh	Gov. T. J. Jarvis	1883 to 1886
R. H. Lewis, M. D	Raleigh	State Board	1884 to 1893
Thomas F. Wood, M. D., Secretary	Wilmington	State Society	1885 to 1887
William D. Hilliard, M. D	Asheville	State Society	1885 to 1891
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1885 to 1881
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1885 to 1897
J. H. Tucker, M. D	Henderson	Gov. A. M. Scales	1885 to 1887
R. H. Lewis, M. D., Secretary	Raleigh	State Society	1887 to 1897
H. T. Bahnson, M. D., President	Winston-Salem	State Society	1887 to 1893
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1887 to 1888
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1887 to 1889
J. H. Tucker, M. D	Henderson	Gov. A. M. Scales	1887 to 1889
J. L. Ludlow, Civil Engineer	Winston	Gov. A. M. Scales	1888 to 1881
J. H. Tucker, M. D	Henderson	Gov. D. G. Fowle	1889 to 1891
F. P. Venable, Ph. D., Chemist	Chapel Hill	Gov. D. G. Fowle	1889 to 1891
J. L. Ludlow, Civil Engineer	Winston	Gov. D. G. Fowle	1889 to 1893
J. A. Hodges, M. D	Fayetteville	State Society	1889 to 1892
J. M. Baker, M. D	Tarboro	State Society	1889 to 1893
J. H. Tucker, M. D	Henderson	Gov. Thomas M. Holt	1891 to 1893
F. P. Venable, Ph. D., Chemist	Chapel Hill	Gov. Thomas M. Holt	1891 to 1893
J. L. Ludlow, Civil Engineer	Winston	Gov. Thomas M. Holt	1891 to 1892
*Thos. F. Wood, M. D., Secretary	Wilmington	State Society	1891 to 1897
Geo. G. Thomas, M. D., President	Wilmington	State Board Health	1892 to 1897
S. Westray Battle, M. D	Asheville	State Society	1891 to 1895
W. H. Harrell, M. D	Williamston	State Society	1892 to 1895
John Whitehead, M. D	Salisbury	State Board Health	1893 to 1895
W. H. G. Lucas, M. D	White Hall	Gov. Elias Carr	1893 to 1895
F. P. Venable, Ph. D., Chemist	Chapel Hill	Gov. Elias Carr	1893 to 1895
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1893 to 1895
R. H. Lewis, M. D., Secretary	Raleigh	Gov. Elias Carr	1893 to 1895
W. P. Beall, M. D	Greensboro	Gov. Elias Carr	1894 to 1897
John Whitehead, M. D	Salisbury	State Society	1895 to 1897
W. H. Harrell, M. D	Williamston	State Society	1895 to 1897
W. P. Beall, M. D	Greensboro	Gov. Elias Carr	1895 to 1897
W. J. Lumsden, M. D	Elizabeth City	Gov. Elias Carr	1895 to 1897
R. H. Lewis, M. D., Secretary	Raleigh	Gov. Elias Carr	1895 to 1897
F. P. Venable, Ph. D., Chemist	Chapel Hill	Gov. Elias Carr	1895 to 1897
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1895 to 1897
C. J. O'Hagan, M. D	Greenville	Gov. D. L. Russell	1897 to 1899
John D. Spicer, M. D	Goldsboro	Gov. D. L. Russell	1897 to 1899
J. L. Nicholson, M. D	Richlands	Gov. D. L. Russell	1897 to 1899
R. H. Lewis, M. D., Secretary	Raleigh	Gov. D. L. Russell	1897 to 1899
A. W. Shaffer, Sanitary Engineer	Raleigh	Gov. D. L. Russell	1897 to 1899
Charles J. O'Hagan, M. D	Greenville	Gov. D. L. Russell	1899 to 1901
J. L. Nicholson, M. D	Richlands	Gov. D. L. Russell	1899 to 1901
Albert Anderson, M. D	Wilson	Gov. D. L. Russell	1899 to 1901
R. H. Lewis, M. D., Secretary	Raleigh	Gov. D. L. Russell	1899 to 1901
A. W. Shaffer, Civil Engineer	Raleigh	Gov. D. L. Russell	1899 to 1901
Geo. G. Thomas, M. D., President	Wilmington	State Society	1899 to 1901
S. Westray Battle, M. D	Asheville	State Society	1899 to 1901
H. W. Lewis, M. D	Jackson	State Society	1899 to 1901
H. H. Dodson, M. D	Milton	State Society	1899 to 1901
R. H. Lewis, M. D., Secretary	Raleigh	Gov. C. B. Aycock	1901 to 1907
W. P. Ivey, M. D	Lenoir	Gov. C. B. Aycock	1901 to 1907
Geo. G. Thomas, M. D., President	Wilmington	Gov. C. B. Aycock	1901 to 1905
Francis Duffy, M. D	NewBern	Gov. C. B. Aycock	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1901 to 1903
S. Westray Battle, M. D	Asheville	State Society	1901 to 1907
H. W. Lewis, M. D	Northampton	State Society	1901 to 1907
W. H. Whitehead, M. D	Rocky Mount	State Society	1901 to 1905
J. L. Nicholson, M. D	Richlands	State Society	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1903 to 1909
J. Howell Way, M. D	Waynesville	Gov. R. B. Glenn	1905 to 1911
W. C. Spencer, M. D	Winston	Gov. R. B. Glenn	1905 to 1911
Geo. G. Thomas, M. D., President	Wilmington	State Society	1905 to 1911
Thomas E. Anderson, M. D	Statesville	State Society	1905 to 1911
R. H. Lewis, M. D	Raleigh	Gov. R. B. Glenn	1907 to 1913
E. C. Register, M. D	Charlotte	Gov. R. B. Glenn	1907 to 1913
David T. Tayloe, M. D	Washington	State Society	1907 to 1913
James A. Burroughs, M. D	Asheville	State Society	1907 to 1913

*Died in 1892, leaving a five-year unexpired term, which was filled by the board.

Officers and Committees—1907.

President—Dr. SAMUEL D. BOOTH.....Oxford
First Vice-President—Dr. CHAS. M. STRONG.....Charlotte
Second Vice-President—Dr. J. E. McLAUGHLIN.....Statesville
Third Vice-President—Dr. W. F. HARGROVE.....Kinston
Secretary—Dr. DAVID A. STANTON.....High Point
Treasurer—Dr. H. McKEE TUCKER.....Raleigh

Council.

First District—Dr. Oscar McMullan, Elizabeth City.
Second District—Dr. James M. Parrott, Kinston.
Third District—Dr. Frank H. Russell, Wilmington.
Fourth District—Dr. Albert Anderson, Wilson.
Fifth District—Dr. Jacob F. Highsmith, Fayetteville.
Sixth District—Dr. Hubert A. Royster, Raleigh, Secretary.
Seventh District—Dr. Edward C. Register, Charlotte, President.
Eighth District—Dr. J. B. Smith, Pilot Mountain.
Ninth District—Dr. Thos. E. Anderson, Statesville.
Tenth District—Dr. James A. Burroughs, Asheville.

Orator—Dr. L. B. McBrayer, Asheville.
Essayist—Dr. E. T. Dickenson, Wilson.
Leader of Debate—Dr. C. B. Mosely, North Wilkesboro.

Members House of Delegates American Medical Association—Dr. W. J. Lumsden, Elizabeth City; Dr. James M. Templeton, Cary.

Committee on Public Policy and Legislation—Dr. R. H. Lewis, Raleigh; Dr. David T. Tayloe, Washington; Dr. J. E. Brooks, Greensboro; Dr. Geo. C. Thomas, Wilmington. *Ex-Officio*, Drs. S. D. Booth, Oxford, and David A. Stanton, High Point.

Committee on Publication—Dr. David A. Stanton, High Point, *ex-officio;* Dr. T. M. Jordan, Raleigh; Dr. Wm. A. Graham, Durham.

Committee on Scientific Work—Dr. Wm. DeB. MacNider, Chapel Hill; Dr. H. S. Munroe, Davidson; Dr. David A. Stanton, High Point; *ex-officio.*

Committee on Finance—Dr. J. T. J. Battle, Greensboro; Dr. Frank Duffy, New Bern; Dr. J. H. Marsh, Fayetteville.

Committee on Obituaries—Dr. R. D. Jewett, Winston; Dr. A. S. Pendleton, Henderson; Dr. F. H. Holmes, Clinton.

Local Member Committee of Arrangements for 1907 Session—Dr. R. P. Primrose, New Bern.

Committee to Represent North Carolina at the International Congress on Tuberculosis—Drs. R. H. Lewis, Chairman, Raleigh; A. W. Knox,

Raleigh; Ben. K. Hays, Oxford; Chas. O'H. Laughinghouse, Greenville; J. Howell Way, Waynesville; Jas. A. Burroughs, Asheville; J. Roy Williams, Greensboro; William M. Jones, High Point; Chas. A. Julian, Thomasville; A. A. Kent, Lenoir.

Council on Medical Education—Drs. Thomas S. McMullin, Hertford; T. L. Booth, Oxford; Charles Roberson, Greensboro.

Member National Legislative Council—Dr. J. Howell Way, Waynesville.

Chairmen of Sections, Session 1908

Anatomy and Surgery—Dr. Joshua Tayloe, Washington.
Materia Medica and Therapeutics—Dr. L. N. Glenn, McAdensville.
Practice of Medicine—Dr. L. B. McBrayer, Asheville.
Physiology and Chemistry—Dr. E. T. Dickinson, Wilson.
Obstetrics—Dr. Charles T. Harper, Wilmington.
Gynæcology and Abdominal Surgery—Dr. J. F. Highsmith, Fayetteville.
Medical Jurisprudence and State Medicine—Dr. Isaac M. Taylor, Morganton.
Pathology and Microscopy—Dr. Benj. K. Hays, Oxford.
Railway Surgery—Dr. C. A. Julian, Thomasville..
Pædiatrics—Dr. W. W. McKenzie, Salisbury.

Board of Medical Examiners, 1902-'08—A. A. Kent, President, Lenoir, Practice of Medicine; Charles O'H. Laughinghouse, Greenville, Obstetrics and Gynæcology; G. T. Sikes, Grissom, Secretary, Chemistry and Pharmacy; M. H. Fletcher, Asheville, Physiology and Hygiene; James M. Parrott, Kinston, Anatomy and Histology; J. T. J. Battle, Greensboro, Materia Medica and Therapeutics; Frank H. Russell, Wilmington, Surgery.

The North Carolina State Board of Health—Geo. G. Thomas, M. D., President, Wilmington; Thomas E. Anderson, M. D., Statesville; J. Howell Way, M. D., Waynesville; W. O. Spencer, M. D., Winston-Salem; J. L. Ludlow, C. E. Winston-Salem; Edward C. Register, M. D., Charlotte; David T. Tayloe, M. D., Washington; James A. Burroughs, M. D., Asheville; Richard H. Lewis, M. D., Secretary and Treasurer, Raleigh.

The fifty-fifth regular annual session of the Medical Society of the State of North Carolina will be held in Winston, N. C., May 26, 27 and 28, 1908. The cordial co-operation of the officers and members of all component county societies is invited to assist in making the occasion a success.

Programme of the Fifty-fourth Annual Meeting of the Medical Society of the State of North Carolina.

Fifty-fourth annual meeting of the Medical Society of the State of North Carolina was held in Morehead City, June 11, 12 and 13, 1907.

Society called to order at 9:30 a. m., in Assembly Hall of hotel, June 11th, by Dr. R. S. Primrose, Chairman of Committee on Arrangements.

Invocation—Rev. R. D. Cross, Morehead City.

Address of Welcome—Hon. W. L. Arendell, Morehead City.

Response to Address of Welcoome—Dr. Jas. M. Parrott, Kinston.

President's Annual Address—Tuberculosis in the State.

Section—Practice of Medicine.

Chairman—Dr. J. B. H. Knight, Williamston.

Subject—Rheumatism.

Diabetes Mellitus—Dr. J. A. Reagan, Weaverville.

Treatment of the Intestinal Summer diseases in Children—Dr. R. J. Noble, Selma.

Incidents in the Life of a Country Doctor—Dr. W. B. Crawford, Goldsboro.

The Tonsils as Portals of Entry for General Systematic Infections, Especially Tuberculosis—Dr. H. H. Briggs.

The Doctor as an Educator of the Public—Dr. B. K. Hayes, Oxford.

Why is the Middle Ear an Accessory Cavity of the Upper Respiratory Tract, Which Often Becomes the Headquarters of Otitis Media and Acquires Deafness—Dr. W. P. Reaves, Greensboro.

The Antitoxin Treatment of Diphtheria—Dr. C. O. Abernethy, Raleigh.

Tuesday Afternoon, June 11th.

The House of Delegates called to order at 3:15 p. m. The general meeting of the Society resumed at 3 p. m.

The Efficacy of Vaccination—Dr. J. R. Paddison, Oak Ridge.

The Insurance Examiner—Dr. J. T. J. Battle, Greensboro.

Epilepsy, Its Treatment—Dr. Geo. K. Collier, Sonyea, N. Y.

Auto Intoxication, with Report of a Case of Pernicious Anæmia Following Therefrom—Dr. G. A. Caton, New Bern.

Treatment of Labor Pneumonia—Dr. C. G. Ferebee, Shiloh.

An Ethical Physician—Dr. J. T. Burrus, High Point, N. C.

Arsenic Poisoning—Dr. J. W. Ring, of Elkin.

Wednesday Morning, June 12th.

The session of delegates resumed at 9:30 a. m. The general meeting resumed at 9 a. m.

Section—Anatomy and Surgery.

Conservative Prostetectomy—Dr. A. J. Crowell, Charlotte.

Pre-Peritoneal Shortening of the Round Ligaments, a New Method of Dealing with Retro-Deviations—Dr. J. W. Long, Greensboro.

Edward Strudwick, Surgeon—Dr. H. A. Royster, Raleigh.

Anatomical Terminology—Dr. Chas. S. Mangum, Chapel Hill.

Tonsilotomy—Dr. K. P. Battle, Jr., Raleigh.

Liquor Sardii Silicatis: Its Use in Surgery—Dr. Wm. Moncure, Raleigh.

Typhoid Ulcer, with Presentation of Specimen—Dr. L. B. McBrayer, Asheville.

Chairman—Dr. C. A. Julian, Thomasville.

Subject—.....

Pyloric Obstructions—Dr. W. O. Nisbet, Charlotte.

The general meeting of the Society resumed at 3 p. m.

Section—Gynæcology.

Chairman—Dr. B. Ray Browning.

Subject—Palliative Treatment of Some Common Gynæcological Affections.

Report of Case—Dr. A. S. Pendleton, Henderson.

To What Extent Shall we be Conservative, to What Extent Shall we be Radical, with our Surgery in Ovarian Diseases?—Dr. J. Highsmith, Fayetteville.

Wednesday Evening.

The general meeting of the Society will be resumed at 8:15 p. m.

The Annual Oration—Dr. L. B. McBrayer, Asheville—The Doctor a Call to the Higher Life.

The Annual Essay—Dr. E. T. Dickenson, Wilson—Problems and Tendencies of Our Profession.

Thursday Morning, June 13th.

Hypermisis Grandarum Scrofolamine: Its Origin, Action and Therapy—K. P. B. Bonner, Morehead City.

An Interesting Case—J. W. New, Monroe.

Cæsarean Section—Dr. Seavy Highsmith, Fayetteville.

Thursday Afternoon.

Subject—.....

Section—Railway Surgery.

Chairman—Dr. W. E. Headen, Morehead City.

Subject—Recent Advances in Railway Relief Departments.

Some Practical Points in Railway Surgery—Dr. J. M. Parrott, Kinston.

When and Where to Amputate—Dr. A. B. Miller, Goldsboro.

Subject—Pædiatrics.

Chairman—Dr. O. W. Holloway, Northside.

Subject—Intro-Colitis: Etiology and Treatment.

MINUTES

OF THE

FIFTY-FOURTH REGULAR ANNUAL SESSION

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

HELD IN

Morehead City, N. C., June 11, 12 and 13, 1907.

General Meeting.

The Fifty-fourth Annual Session of the Medical Society of the State of North Carolina was called to order in the assembly hall of the hotel at Morehead City June 11, 1907, with Dr. R. S. Primrose, Chairman of Committee of Arrangements, presiding.

The Rev. R. D. Cross was introduced and offered invocation. Dr. Primrose introduced the Hon. W. L. Arendell, of Morehead City, who delivered a most entertaining address of welcome.

Dr. J. M. Parrott, of Kinston, responded in a happy manner to the address of welcome.

Dr. Primrose next introduced President Booth, who delivered the Annual Address. (See Index for same.)

See Explanation and Apology, page 5.

SECRETARY'S REPORT.

MOREHEAD CITY, N. C., June 11th, 1907.

Mr. President and Gentlemen of the House of Delegates: In submitting this, my first annual report as your Secretary, I shall not claim any more of your time than is necessary to call your attention to such matters as most vitally pertain to the welfare of the Profession, and would promote the upbuilding of the State Society.

You are all physicians and know your duty, not only to yourselves,

your patients, and the public, but your Society also. In all particulars save one, there is no doubt but what you are faithful. In the discharge of your duty to your Society I have found an indifference that is puzzling, an indifference that has very much hindered me in the work of the office to which you have elected me. However, I am always ready to recognize the faithful, and declare my appreciation of the efforts of any one to assist along all lines tending to hold and weld a feeling of fraternal, and professional enthusiasm. When I tell you that I have sent out over 3,000 pieces of mail, and that every piece had a bearing upon the profession, and received less than 300 replies, you can understand what I mean when I say I have found a spirit of indifference that is puzzling.

This statement is not made in a spirit of criticism, but simply to show how hard it is to accomplish the work of the Secretary. Soon after I assumed the office, my first effort was to reach every man practicing medicine in North Carolina who was not a member of the State Society. To this end I wrote a letter to each County Secretary asking for a list of the physicians in his County who were not members of their County Society. Out of the eighty-four letters I received twenty replies. I waited three months and sent to the remaining sixty-four a like letter, to this letter I got twenty replies, leaving forty-four counties not heard from at all.

Out of the number of physicians reported to me as not members of any County Medical Society, I wrote an appeal to identify themselves with their local organization, in response to this letter I had a variety of answers, some giving one reason, and some another why they were not members of their County Society. Some thanked me for calling their attention to the matter, and some made no reply. How many members we gained by this effort I do not know. Out of the eighty-seven counties organized I have a report from seventy-one counties. To each physician reported as not a member of his county society, I sent a letter showing that he was not in good standing, and could not receive a copy of the Transactions for 1907 unless his dues were paid. As a result of this effort a good many delinquent physicians were re-instated.

These statements are not specially encouraging, and are not so bad as to be discouraging. By persistence along this line I believe many more will be reinstated before the year is past.

Just here I want to encourage the Councilors and County Secretaries to be industrious. It is much easier for them to get men to join their County Society than it is for the State Secretary. By a little effort on their part men who would be acceptable members could be brought into membership.

Another matter which, I think, claims our attention is that of the violation of the resolution passed at Greensboro two years ago relative to Life Insurance Examinations. I have the statistics of the examiners for one company in North Carolina which shows that out of ninety-

seven examiners sixty-eight agree to continue to examine at $3.00, while twenty-nine refused to examine for less than $5.00. This shows bad faith in the resolution passed two years ago, and has the effect to bring about discord among physicians where disregard is shown the resolution.

Two additional Counties were organized during the year, Mitchell and Hyde, making a total now of eighty-one chartered County Medical Societies in the State. Out of the eighty-one chartered counties, I received reports from seventy-one* County Secretaries which shows 888 physicians in good standing. Out of the fifteen counties not heard from I find, according to the report of 1906, 223 physicians in good standing last year. It would be safe to estimate that at least 75 per cent of this number, 223, would be glad to be identified with the State Society, and would be, had the County Secretaries made their report. Granting this, there is in the State 1,095 physicians who believe in organization, and who are standing together to fight the battles of our profession.

To get the reports from all the County Secretaries seems an impossibility, and unless I have a report what else can I do but class each County not heard from as DEAD? To do this as you can see would be to cut off about 223 physicians from receiving the proceedings of this meeting. To overcome this I have got to go over a great deal of my work again between the time of this meeting and the time of publishing the transactions.

I call your attention to this to show how much the labor of the Secretary could be lessened, time saved, and the profession benefited by each one who has a work to do if he would do it.

As the By-Laws of our Society provide for district meetings some of the Councilors took advantage of this to enlarge their usefulness, and had quite satisfactory results. By a little effort the physicians from a number of counties were brought together and the social as well as the professional spirit was increased.

On account of a change of date of this meeting from May 28th to June 11th the A. M. A. preceded the State meeting. There being only one legal delegate to the A. M. A. and N. C. being entitled to three, Dr. M. L. Stevens, of Asheville, and Dr. J. W. Long, of Greensboro, were appointed to represent our society at this A. M. A.

After the adjournment of the State Society at Charlotte last year the Secretary of the A. M. A. asked for the appointment of a Committee on Education. This committee was as follows: Dr. T. S. McMullin, Hertford, Chairman; Dr. T. L. Booth, Oxford, and Dr. Chas. Roberson, Greensboro.

I can not close this report without giving due credit as well as sincere thanks to Ex-Secretary Dr. J. Howell Way for his service in getting out the Transactions for 1906. To Dr. Way is due entirely the credit for that handsome volume which far surpasses any volume of Transactions

*Eleven County Secretaries have reported since session at Morehead City, June '07.

I have seen from any other State Medical Society. It is a beautiful exposition of his ability as a Secretary.

In conclusion, gentlemen, I remind you that the future success of our efforts to advance the profession in North Carolina does not lie in the State President or Secretary alone, but that each one has a part in this work, and especially do the Councilors, and County Secretaries figure conspicuously in the growth and welding of the Society.

The work was new to me and that I have made mistakes I do not deny, and how much I have left undone that should have been done you all possibly see and appreciate more than I do.

Fraternally submitted,

D. A. STANTON, Secretary.

RESOLUTIONS OF SYMPATHY TO DRS. MURPHY AND HINES.

Dr. Battle: I merely wish to engage the attention of the Society for a few moments before the gentleman goes on. It is simply with reference to taking some notice of the illness of Dr. P. L. Murphy, of Morganton. It seems to me that in recognition of his services to the State and the profession, that we should take some notice of his illness, and I wish to make a motion that the following resolution be adopted and sent to Dr. Murphy:

"Resolved, That the Medical Society of North Carolina learns with regret of the continued illness of its distinguished honorary fellow, Dr. P. L. Murphy. It wishes to express to him its sympathy in his affliction, and in the interest of the State and especially of our unfortunate insane in whose service he has accomplished such great things, it earnestly hopes for his speedy recovery and return to active duty."

The motion was seconded by Dr. Lewis, of Raleigh, and on being put to a vote was unanimously adopted, and the Secretary instructed to communicate the same to Dr. Murphy.

Dr. Thomas: Mr. President, I move that the resolution be telegraphed to Dr. Murphy.

Dr. Battle: I second the motion.

The same was put and unanimously carried, and the Secretary thereupon wired Dr. Murphy in accordance with the instructions as above, in the following words:

The following resolution was to-day unanimously passed by the North Carolina Medical Society, and I have the honor to transmit the same to you:

(Copy of resolution.) (Signed) D. A. STANTON, *Secretary.*

Dr. SYKES: Mr. President, I wish to call the attention of the Society to the fact that Dr. P. E. Hines, of Raleigh, has been paralyzed and is unable to leave his bed, and I wish to make a motion that a telegram expressing the sympathy of this body also be sent to Dr. Hines.

Dr. HIGHSMITH: I second the motion.

The motion, being put, was unanimously adopted, and the Secretary instructed to send a telegram to Dr. Hines expressing the sympathy of the Society to him in his affliction.

Morehead City, June 11, 1907.

Resolved, That the Medical Society of the State of North Carolina, learning with regret of the continued illness of its distinguished fellow member, Dr. P. E. Hines, it wishes to express to him its sympathy in his sore affliction in the interest that the Society feels. It earnestly hopes for his speedy recovery and return to active duty.

Resolution offered by Dr. Sikes and seconded by Dr. Highsmith. On the part of the Society.

(Signed) D. A. STANTON, *Sec'y.*

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

The attention of our profession is called to wise and timely suggestions contained in our President's splendid address. The ideas therein advanced along the lines of Sanitary Laws and Preventive Medicine can be emphasized with advantage and should be followed. He wisely calls our attention to the fact that the enactment of laws sanitary, without public endorsement is practically worthless and the committee suggests that profession earnestly strive by heart to heart talks to render more popular than ever before our medical laws.

The Committee especially desires to call your attention to the ideas advanced as to the management of tuberculosis by the State.

The Committee feels these are wise and valuable ideas and that the profession should labor, by educating the public to accept them, to attain the consummation which they suggest.

All in all, the paper is a valuable one, and should be carefully read and digested intellectually by the profession.

REPORT OF THE OBITUARY COMMITTEE.

The Obituary Committee made the following report to the Fifty-fourth Annual Session of the Medical Society of the State of North Carolina, Morehead City, N. C., June 13, 1907:

COMMITTEE.

Dr. R. D. JEWETT, Winston. Dr. A. S. PENDLETON, Henderson.
Dr. F. H. HOLMES, Clinton.

The report of the committee was accepted and ordered printed in the Transactions.

IN MEMORIAM.

ROBERT A. PATTERSON.
C. B. McANALLY.
D. C. PARRIS.
ELISHA PORTER.
CHARLES A. BLOUNT.
J. A. J. PATTERSON.
R. J. BREVARD.
W. A. GOODE.
W. H. LILLY.
PLATO H. LEE.
DUNCAN SINCLAIR.
W. W. GRIGGS.
THOMAS B. REDDICK.
JOSIAH P. SUGGS.
J. G. BROADNAX.
E. H. BROOKS.
ALSON FULLER.
A. J. JONES.
RICHARD B. BAKER.
A. G. HENDERSON.
J. G. PENNINGTON.
J. B. WILLIAMS.
T. P. JERMAN.
DR. LITTLEJOHN.

Necrology.

CHARLES B. McANALLY, M. D.

Dr. Charles B. McAnally was born in Stokes County, North Carolina, in 1862, and received his medical degree from the College of Physicians and Surgeons, of New York, in 1886. He practiced his profession in Madison, N. C., this being his home at the time of his death, which occurred in Richmond, Va., on the 15th of July, 1907. Besides his connection with the State Society he was a charter member of the Tri-State Medical Society, and was, at the time of his death, President of the Rockingham County Medical Society.

Dr. McAnally was a man of sterling qualities both of mind and heart. He was held in the highest esteem by all classes of people in the section in which he practiced. In evidence of the appreciation felt for him, we take the liberty of quoting from a brief memorial which was written by one of his friends. He writes: "From the moment I heard of the death of Dr. McAnally I have had a mind to write a tribute to his precious memory, but I felt too deeply grieved to attempt such a task; besides I realized the inadequacy of human language to express the sentiments of my heart to the nobility of his character and the high esteem in which I held him. Within the scope of my acquaintance and among the number of my friends no one ever held a warmer place in my heart's sincere love and friendship, and I had the appreciative assurance that he was my friend. This he not only expressed in words, but exemplified in deeds of kindness and benevolence in my own home when the shadows were deep and sorrow swept like a tempest over our souls. It has been truthfully said by others that Dr. McAnally was no ordinary man. He was splendidly endowed with a superior intellect, embellished with ripe scholarship, a man of commanding common sense with ideas and convictions of his own, unswayed and unswerved by community clamor. Like all great men he was not always understood, consequently his conduct was often misrepresented. He thought above and in advance of the ordinary and they could not understand him in the applied truths and principles of honesty and uprightness to the common everyday affairs of life. To my conception, I never met a man with whom I had an intimate acquaintance, who possessed in a larger degree those essential elements of sincerity, honesty, truthfulness and uprightness as so beautifully adorned his knightly character. I ever found him a noble, true-hearted, Christian gentleman of knightly devotion to his church and friends. To my mind, he lived a life unashamed, and therefore died unafraid and went home to God to wear his crown won by Christian warfare here below."

DR. DAVID C. PARRIS.

Died at Hillsboro, N. C., where he had resided since 1887. Native of Spartanburg county, S. C. Studied at Weaverille College, N. C., and graduated Atlanta Medical College 1882. A quiet, modest, unassuming gentleman.

DR. ELISHA PORTER.

Was public spirited, progressive, a true soldier in war and a leading factor in the State's development in peace. He was seventy-four years old.

DR. CHARLES A. BLOUNT.

Died in Pitt county, June, 1906.

DR. J. A. J. PATTERSON.

Died at Liberty, N. C., July 6, 1906, after an illness of several months, suffering from stomach trouble. Dr. Patterson was about 65 years old. There was not a man in the community held in higher esteem. Dr. Patterson is survived by a wife, one son, Dr. R. D. Patterson, and three daughters.

DR. R. J. BREVARD.

Died August 11, 1906, at his home in Charlotte. Dr. Brevard was the youngest son of the late Judge Theodore W. Brevard and Mrs. Caroline Brevard. He inherited from his parents position and charm of manner. Both were of distinguished lineage and from them he derived his fine mind, his gentleness, his loyalty to friends, his magnetism and his courage. He was born in Tallahassee, Fla., December 15, 1848, thus being in his 58th year.

DR. W. A. GOODE.

Dr. W. A. Goode was born Sept. 21, 1865, and died August 3rd, 1906. He was converted and joined the Methodist Episcopal Church, South, at the age of 16. For many years he was a steward, and one of the best I have ever known; he loved the church and the preachers, and it was a pleasure to him to look after their needs. He enjoyed religion: he knew he was a child of God and a friend of Jesus Christ, and meant always to give him the best.

He had the love and confidence of all the people who knew him. He represented his county in the House of Representatives in 1903, and never has Cleveland sent to the Legislature a man who more conscientiously did his work. He never went again because he did not wish to go. He was a graduate of Atlanta Medical College, and for years he gave his time, day or night, to relieving the sufferer. Not only may it be said that Dr. Goode was a good physician—he was a messenger of mercy. His visits were a benediction; he left the home brighter and better. But in his own home he was strongest and best, and there he is missed the most. He was a model in his home. Cleveland county will miss him. The community will miss him. Old Beulah church will miss him. But Sister Goode and the seven children left in the home will miss him most. May God comfort them.

Dr. WILLIAM H. LILLY.

Dr. William H. Lilly, a prominent and distinguished physician, died September 12, 1907, after a lingering illness of two months. He had been in failing health for several years. He was born in Montgomery County in 1834. Dr. Lilly leaves an invalid wife. He had no children.

Dr. P. H. LEE.

Dr. P. H. Lee died Sept. 26, 1906, at Alexander, N. C. Dr. Lee once resided in Asheville, where he had many friends. He was buried at Alexander.

Dr. DUNCAN SINCLAIR.

The recent death of Dr. Duncan Sinclair was a distinct loss to the people of Robeson county. He was in his 85th year, and until recently, when he was injured by an accidental dislocation of the shoulder, he maintained a large and lucrative practice. He was a man of no ordinary mental equipment. In the canvass for the constitutional amendment in 1875, Mr. Englehard, then editor of the Wilmington Journal, who was present at the discussion in Lumberton, stated in his paper that Dr. Sinclair made the best political speech he had ever heard. Dr. Sinclair and the late C. A. McEachern were the delegates to that convention. He had both a logical and an analytical mind. As a physician he had no superior and few equals. A man of quiet manners and a forceful mentality, he naturally dominated in every sphere of his influence, but above all and infinitely more important than all else he ever acted upon Christian principles, and on those principles he was not afraid to die.

With an intellect far above the ordinary, which was cultivated and refined by study and observation, his company was ever sought by old and young. The death of such men is always a great loss to any community, because such vacancies are ever hard to fill.

Dr. W. W. GRIGGS.

Dr. W. W. Griggs was born in Princess Anne county, Virginia, January 16th, 1841. Died June 1, 1907.

After having received thorough preliminary training he entered the Medical College of Virginia where he took a high stand as a medical student. During the times which tried men's souls, he entered the Confederate Navy as a surgeon, where he attained distinction.

After the war he located at Indian Town, Camden county, and did general practice in the counties of Camden and Currituck.

In 1882 he established himself in Elizabeth City, N. C., where he did a wholesale and retail drug business and general practice.

His son, Dr. J. B. Griggs was connected with him in the drug business and practice.

Dr. Griggs was a great favorite of the young men who knew him, and many young men have been inspired to greater activity in professional work by his good advice and congenial spirit towards them.

He was president of the Medical Society of Pasquotank, Camden and Dare.

He was a tried and true Mason and a great lover of the principles of Masonry.

He was buried in the cemetery at Elizabeth City with Masonic honors and the last sad rites of the Episcopal Church of which he had been a member for many years. A large concourse of friends came from a distance to pay the last tribute of respect to the remains of this great and good man. He was a great conversationalist and a great lover of good books; but the most beautiful part of his life was his devotion to his friends, his wife and children.

Dr. THOMAS B. RIDDICK.

Dr. Thomas B. Riddick was born near Nixonton, N. C., July 18th, 1857. He graduated at the College of Physicians and Surgeons," Baltimore, Md., in 1892, and has practiced medicine since in Woodville, N. C. He was married to Lucy Gatling Cowper, of Gatesville, Gates County, on Dec. 14th, 1899. He died of Bright's Disease after a confinement of six months, on March 4th, 1907. He was a member of the State Medical Society and also of the Seaboard. He leaves two little children—a little girl three years old, and a boy only two months old—a wife, a mother, and a sister.

The medical profession has lost a loyal member and no one can take "Tom" Riddick's place.

Dr. JOSIAH P. SUGG.

Dr. Josiah P. Sugg died January 25, 1907, in the Pittman Hospital, being in his 66th year. He was a native of Edgecombe county, had just begun to read medicine when the Civil War broke out. He volunteered and enlisted in Co. I, 15th regiment. He was soon detailed as a hospital steward in which capacity he served throughout the war.

Dr. ALSON FULLER.

Dr. Alson Fuller, of Fullers, Randolph County, died Dec. 18, 1906, aged seventy-five.

Dr. Fuller was one of the most highly esteemed and propsperous citizens of his county. For more than fifty years was the beloved physician of his neighborhood. Dr. Fuller was a large land owner and a wealthy man. He was a leading member of the Methodist Church and a prominent Mason. The esteem in which he was held was in part attested by the large congregation present at the funeral—the largest in the history of that community.

Dr. JOHN G. BROADNAX.

Dr. John G. Broadnax, one of Greensboro's oldest and most highly respected citizens, died from an attack of apoplexy at his home in West Market street. His death was wholly unexpected and

came as a shock to his many friends. He was in his usual health the previous morning, and as was his custom, attended services at the Episcopal church, of which he was a member. He returned home about one o'clock and, feeling tired, lay down to rest. It was not unusual for him to sleep in the afternoon, and the family made no effort to wake him until about 7.30 o'clock, when it was found impossible to arouse him. Dr. Roberson and Dr. Farrar were hastily summoned, but death came before they could reach the house.

Dr. Broadnax is survived by a widow and two children, John G. Broadnax, Jr., of Greensboro, and Mrs. John Austin Yates, of Staten Island, N. Y. Another daughter, the first wife of the late Gen. James D. Glenn, died several years ago. The doctor had a large circle of friends in the city, where he had lived for thirty years, and throughout the entire South.

John Grammer Broadnax was born in Dinwiddie county, Virginia, April 14, 1829. His earliest known ancestor in this country was William Broadnax, who married Mrs. Travis in the settlement of Jamestown, Va. His father was Gen. William Henry Broadnax, a lawyer and statesman, who was held in high esteem and whose public services were prominently identified with the history of Virginia. The mother of John Grammar Broadnax was Miss Ann Elizabeth Withers, a lady of the highest character and a member of one of Virginia's best families.

Dr. Broadnax was prepared for college and was graduated from the Virginia Military Institute with distinction in 1848. He finished the college course in three years. He chose the medical profession for his life work, and was graduated with honor from the Medical College of the University of Virginia in 1849. He then took a post-graduate course in Jefferson College at Philadelphia, and was resident physician of the Baltimore almshouse during the year 1850. He spent the next three years in Paris. In 1851 he sailed from Philadelphia to Liverpool, intending to study medicine there, but after comparison between the advantages of London and Paris, he found those of the French capital vastly superior, as was attested by the large number of English and Scotch students in Paris. He studied surgery under Joubert and Roux, and medicine under Louis, Rostan and Chomel, of the Hotel Dieu hospital, also under Velpeau and Nealton, of La Charitee, and Villiex, of La Pitie, and Malgaine, of St. Louis' hospital.

The study of percussion was under Piorry, of the La Charitee hospital. At the end of his year's course he took a walking tour through France, which proved both interesting and instructive. It was during his stay in France that Napoleon made his coup d'etat, and Dr. Broadnax was an interested observer of the many exciting scenes.

Dr. Broadnax commenced the regular practice of medicine in November, 1853, at Petersburg, Va., and was at once accorded an enviable position in his profession as an eminent practitioner. When the war came on his superior capabilities led to his being employed as a surgeon in the Confederate army and be assigned to hospital duties. In 1862 Surgeon

Broadnax was placed in charge of the South Carolina hospital in Petersburg and his fine abilities were well displayed in the management. In 1863 he was transferred to the North Carolina hospital, and labored faithfully, his services being frequently commented upon by the papers of that day as tenderly solicitous and efficient. Throughout the war his services to the Confederate army were of the best that he could give. His work in detail can never be fully known or adequately appreciated, but his record lives in the hearts of thousands of those to whom he brought needed relief.

After the war Dr. Broadnax located in Rockingham County, N. C., and successfully followed his profession for more than twenty years. In 1887 he came to Greensboro, where he entered upon a lucrative practice. He was a member of the board of examiners appointed by the United States government during 1886-'87 to pass upon the applications of disabled soldiers for pensions. He was examiner for various insurance companies and surgeon for the Southern railway for fifteen years. He was a member of the State Medical Society, the International Association of Railway Surgeons and the Association of Southern Railway Surgeons.

On October 1, 1856, he married Mary W. Broadnax. To them were born three children, and after a few years of happy life together she passed away. On April 24, 1866, he married Ella Preston Burch, who became the mother of one child, a son, now living in Greensboro, John G. Broadnax, Jr.

Dr. ROBT. A. PATTERSON.

Dr. Robert A. Patterson, the oldest and one of the most highly respected physicians of Littleton, died June 14, 1907, in his 83rd year. He was a Confederate surgeon and served with distinction with the army in Northern Virginia. He was a nephew of the late Bishop Atkinson and the Rev. James Atkinson and a brother of Capt. John Patterson, of Petersburg, Va.

He leaves a wife, five daughters and three sons, one of whom is John R. Patterson, sheriff of Halifax county.

He had been a most useful and highly honored citizen and the whole community is grieved at his death.

Dr. EUGENE HASTINGS BROOKS.

Dr. Eugene Hastings Brooks died at his home on Main street, Reidsville, after a short illness, pneumonia causing his death. He had been confined to his bed only a few days and the sad news of his demise was a great surprise and shock to his friends. Dr. Brooks had not enjoyed real good health for the past few months, but recently it appeared that he was again getting all right. Monday afternoon he was called to High Point on professional business. When he left home he appeared to be in excellent spirits and many of his ac-

quaintances remarked that he looked the picture of health. That night while at supper in High Point he was taken with a chill. He reached Reidsville desperately ill. Three physicians attended him and worked zealously, but in vain.

Dr. Crawford paid a beautiful tribute to the deceased, and the lovely things said of him will soothe the bleeding hearts of those near and dear to him. The pastor said that Dr. Brooks was born in the church—his father being a Mehodist minister at the time of the deceased's birth in the parsonage at Everettsville. He was brought up under Christian influence and connected himself with the church early in life. He had chosen for his life work a profession to relieve suffering humanity, which in itself is characteristic of the man to do good toward his fellow-beings. He had built up a practice of which any physician should be proud. There are many homes in mourning since his death. He had administered faithfully to his patients. His death is due probably from a trip he made to Wentworth several months ago in a heavy downpour of rain, which was the beginning of the illness that at last proved fatal.

Dr. Brooks was born in the little town oof Everettsville, Wayne County, seven miles south of Goldsboro, on the 20th of September, 1871, being, therefore, 35 years of age. He was prepared for college in the schools of Wilson, Goldsboro and Shelby. After going through the sophomore year at Old Trinity College, under the administration of Dr. Crowell, he pursued a course in medicine and graduated from the Baltimore Medical College in 1894. He soon afterwards commenced the practice of medicine at Monroeton, Rockingham County, where he succeeded in building up a lucrative practice. In 1899 he moved his office to Reidsville, where he continued his practice to the time of his death. He gained the confidence of his fellow practitioners and he was generally selected for the most important duties at the annual meetings of the State Medical Society. He possessed a fine voice and always handled his subject with an earnestness and skill that reached the hearts of his hearers. He led in the debates at all session of the society, always speaking with a force of clear thought and beauty diction that rendered his talks most effective. His brother physicians will miss him.

He was an active member of nearly all of the local benevolent orders. In the Royal Arcanum Council he held the highest office—grand regent—of the State council. He had held high offices in the other secret orders. He was closely identified with the National Guard of this State, being major of the hospital corps of the Third North Carolina Regiment. Recently he was made a surgeon of the Southern Railway, another position of trust and honor.

On June 16, 1897, he was married to Miss Florence Cummings, of Rockingham county, who, with three yooung children, two daughters and a son, survives him. His oldest child, a bright boy of three summers, was

taken from him five years ago. The deceased is also survived by his father, Rev. Jno. Brooks, of Reidsville, and two brothers, Dr. Wm. H. Brooks, U. S. A., stationed in Cuba, and Dr. Fletcher H. Brooks, U. S. N., now stationed in California.

Dr. A. J. JONES.

We regret to chronicle the death of Dr. A. J. Jones, who died at his home at Kenansville Monday morning. He had only been confined to his room for a few days and his death will be a surprise to his host of friends throughout this section. He had been a familiar figure here where he had practiced medicine for about 40 years. When in young manhood Dr. Jones began reading medicine under his friend, Dr. L. Hussey, but the war came on and he volunteered his services and under the guidance of the "Stars and Bars," he went forth to offer his body as a bulwark to protect the South.

After filling every duty there that fell upon him for four years, and after seeing the last Confederate soldier lay down his arms by being overpowered but not defeated, and after Lee's farewell to his soldiers, he turned his sad and blackened face toward home. He saw the fields gone to waste, he saw the former slaves march from under and he saw the Old North State reel and rock for the rapidly approaching day when she was governed by scallawags and carpet-baggers and the ignorant horde of negroes. He, like thousands of other true men to the South, bore it all with courage and with hope. They began to build up the South with looms and plowshares and never-tiring energy. We who were born too late will never learn one half the story. Dr. Jones lived as best he could for a while after the war, and he managed finally to attend college in Atlanta, and from that he graduated at the Baltimore College of Medicine. During his long career as a physician he took a high stand and those who knew him best admired him for his honesty, his ability and courtesy. He never failed to greet a passer-by and he never forgot to lift his hat in respect to a woman. He, like all the gentlemen of the old school, never forgot the lesson that politeness pays better than rudeness and that love wins more victories than hate.

His death has brought sorrow to the people wherever he was known. His wife and three children survive him. The children are Captain Warren L. Jones, of Wilmington; Mr. Ed. Jones, of Asheville, and Miss Daisy Jones, of Kenansville.

RICHARD BEVERLY BAKER, M. D.

The subject of this sketch was born on May 17, 1821, and died at his home in Hickory, N. C., on Tuesday, November 6, 1906, aged eighty-five years, seven months and nineteen days.

Dr. Baker, a Tar Heel by birth, was justly proud of the history of

his State, a brother of General J. B. Baker, a distinguished cavalry leader in the army of Northern Virvinia, and himself a surgeon in the same army, doing valiant and efficient service as such for the Confederate States. A man of liberal education from the best schools, both classical and professional of his earlier days, and was therefore well equipped for the practice of his chosen profession, which he pursued almost to the very day of his death with a love of his work which neither the varying vicissitudes of his life nor yet the inroads of old age could in the least abate; with a fidelity to the needs of suffering humanity which has never been excelled among the many whose calling it has been, or is, to know the heart, to count the pulse, or tell of life and death, their bane and antidote; with an energy of both mind and body, which never yielded to the demands of his own personal comfort and care, going out, as he often did, in cold and storm, to alleviate if possible, the sufferings of his kind; nor stopped he to ask whether those who called him were able to pay or were worthy, but went as readily to the hovel and to the home of the poor, as to the home of those who lived at ease in comparative plenty and luxury; and almost to the day of his death his mind retained its wonted vigor; calling upon a scholarly friend on the street to assure him of the correct translation of a Latin phrase which he had just read, and only a short time ago scolding his family for not calling him from bed at night to answer a fire alarm in the town—saying: "If I do not go to help save my neighbor's property, how can I expect them to help save mine?"—a practical application of the Golden Rule.

He knew no motive that involved alone the care of self—hence he died poor.

He was what we call "a born doctor," developed by education and study, practice and experiences; had he lived his long and useful life under other conditions with money-getting methods of practice it can not be doubted that he would have attained unto prominent professional position, if not to wealth and all its comforts. I doubt not that his professional associates will agree that his diagnosis of disease was usually made with wonderful correctness, and many are the families and individuals now living in Hickory, especially the women, who will also agree that at the sick bed he was wise, he was kind, tender and sympathetic, and never entered the house of the suffering without making his best effort to comfort. As such he was not only the doctor, but also the nurse, in many cases remaining with his patients in the latter capacity all night. Dr. Baker had his peculiarities, and who of us that stand for anything in the battle of life have not? His were not repulsive, but rather attracted others to him to inquire what manner of man he was, with the universal answer that, in familiar parlance, he was an "uncut diamond," ever giving out light, however, in abundance to cheer the faint and suffering, or with tender hand softening the pillow of the dying.

He made little profession of anything in words, but spent a long life in living and acting the part of one who loved his fellowmen; tenacious of his opinions which were usually well founded, true to his friends to a degree that neither misfortune nor adversity could sunder, triumphant over his frailties and sorrows, his life was a success attained to by few in that in old age he stood before the world a noble old man.

The town of Hickory in the vigor of her youth received him in 1871, was nourished and nurtured by him for thirty-five years, then a large concourse of her people looked into his open grave and listened to the sad "earth to earth" part of the burial ceremony with this testimonial of justice to his memory—if ever much had been withheld from him while living—that no man had ever lived within her limits who knew more of her inner home life, or had tried to do more for her happiness and prosperity. His wife through fifty-seven years was ever his sweetheart, his children were his treasures to whom he would make any possible sacrifice. He leaves his aged widow, a beautiful instance of fortitude in the presence of her greatest grief, and a tender and affectionate daughter, Mrs. B. R. Anderson, of Washington, D. C., who gave much of her time to him in his declining days and was present at his death, and Mrs. Catherine Carroll Baker, widow of Dr. B. Earle Baker his youngest son, who died some years ago. Kitty, as she is familiarly known in the family and town, with sweetness of temper, ready hands and an affectionate heart, is a living benediction upon the bereaved family.

I turned from his grave with many a remembrance of his great love and kindness toward me and mine, and recalled the law of Ancient Israel: "Thou shalt rise up before the hoary head and honor the face of the old man, and fear thy God"—and also the vision of Abou Ben Adhem, who prayed, "Write me as one that loves his fellowmen."

> The angel wrote and vanished. The next night
> It came again with a great wakening light,
> And showed the names whom love of God had blessed,
> And lo: Ben Adhem's name led all the rest."

DR. A. G. HENDERSON,

aged seventy-four years, died at his home at Woodleaf, Rowan County, March 27, 1907, following an illness of several weeks. He was one of the best known physicians in Rowan in his day and had a wide practice. He had been an invalid several years.

DR. J. G. PENNINGTON,

a well-known and respected citizen of Wilson County, died at his home in Wilson, March 28, 1907. Dr. Pennington had been feeble for some time, but his condition was not considered serious. He leaves a wife and two sons, Julian and Jesse.

Dr. T. P. JERMAN DEAD.

Dr. Thomas Palmer Jerman, venerable father of Mr. B. S. Jerman, cashier of the Commercial and Farmers Bank, and Mr. T. P. Jerman, of the Royall and Borden Company, of Raleigh, died at the home of Mr. B. S. Jerman in Raleigh.

Dr. Jerman was in his 81st year and had been in very feeble health for several years past and his death, on account of a recent operation which had greatly weakened him, was not unexpected.

Dr. Jerman had been a citizen of Ridgeway for fifty-five years, he having moved to that place from his native city of Charleston, S. C., soon after his marriage. The whole section was devoted to him, since in his long life he had lived for the people with the unselfishness of his large spirit. Until within a comparatively few years of his death he was a physician in active practice, and followed his profession with a devotion which showed the sacredness with which he regarded the call to give his life to the curing of disease and the alleviation of suffering. He was the best type of country doctor, a man of learning, wide education and sound judgment, and with it all the democratic instinct and the true physician's power of gaining sympathy and confidence. He spent his many years in constant labor with a large practice with which he permitted nothing to interfere. To the calls of his patients he was indefatigable in attention. It is said of him that he never disregarded a call and never sent a bill for his services.

In the more than half century of intimate association with a large section he made friends by the thousand who will deplore his death. No wrong was found in him and he was loved in numberless homes to which he had brought cheer and sympathy and in many which had been made brighter by his charity.

Dr. LITTLEJOHN.

Dr. Littlejohn, formerly of Mecklenburg County, last two years of Jackson and Swain Counties, died at Whittier about Oct. 25, 1906.

ANNUAL REPORT OF THE SECRETARY OF THE NORTH CAROLINA BOARD OF HEALTH.

MAY 1, 1906—MAY 1, 1907.

During the past year we have suffered no special outbreak of disease and the health of our people in general has been about as usual. A detailed statement of the work of the Board will be found in the Eleventh Biennial Report, which has been for months and still is in the hands of the printer. A copy will be sent to any one asking for it as soon as it is published.

The work of your Secretary has been, for the most part, of the usual routine character, special attention having been paid to the further distribution of the pamphlet on the prevention of tuberculosis. The indications are that the wide circulation of this little pamphlet has made an impression upon our people and has been of real assistance in the campaign against this most fatal of all our diseases. I am satisfied that the plan adopted of sending the pamphlet direct to the individual, with a letter urging him to read it and to assist in its distribution, has added much to its effectiveness. Over 100,000 have been mailed to date and I am confident that no expenditure of our meagre appropriation has brought forth better results than that paid out for the postage on this pamphlet.

With January came the meeting of the General Assembly, which is always a period of mingled hopefulness and anxiety. While the attitude of the last Legislature was, perhaps, less friendly to our license law than has been the case for many sessions, its interest in the public health was more pronounced than usual, an interest that was not simply academic, but one that did something worth while. In the Bulletin for April I printed all the acts of general interest bearing on the public health directly, or indirectly through our medical license law, but it may not be amiss to refer again in this place to the more important.

The act creating the State Laboratory of Hygiene, which carried no annual appropriation from the general fund for its support was so amended as to give it two thousand dollars annually, at the same time increasing the annual tax of sixty dollars upon water companies by four dollars. This latter does not materially increase the income of the laboratory, but all the companies would not pay expressage on water samples and the four dollars was added to cover that. With the tax from the water companies, now numbering fifty-one and gradually increasing year by year, the income will be sufficient, with the money on hand, to adequately equip and conduct an excellent laboratory without outside help. In this connection it is proper to call attention again to the fact that without the generous aid given us by the State Board of Agriculture, we, in all probability, would not have had any laboratory at all. It should be remembered that at first the Board of Agriculture had bio-

logical analyses of drinking water made for us in their laboratory free of charge, until the water tax was obtained four years ago, and that since that time it has, in addition to furnishing the laboratory with gas and water, paid seven hundred and fifty dolars a year towards the salary of the Director. I hope suitable acknowledgement of the enlightened liberality of the Board will be made by the Conjoint Session. The report of the Director for the past year is appended.

In order to extend the benefits of the Laboratory as far as possible to the people an act was passed authorizing the preventive treatment of rabies by the Director, who, in the reorganization, will, doubtless, be a thoroughly trained medical man, when it can be done without interfering with the legitimate work of the laboratory proper.

A decided advance in state medicine was marked by the enactment of a bill establishing a sanatorium for tuberculous patients, appropriating fifteen thousand dollars for a plant and five thousand dollars, annually, for support. The chief credit for this particular legislation is due to Dr. J. E. Brooks, of Greensboro, who was "the man behind the guns" and the Hon. J. R. Gordon, M. D., member from Guilford, of the House of Representatives who was mainly instrumental in securing its passage.

Acknowledgement of this was made by the Board of Directors, of which the Secretary of theBoard of Health, is *ex-officio*, a member, at their first meeting in the election of Dr. Gordon chairman of the Board and Dr. Brooks superintendent of the Sanatorium. While the appropriation is very small it will provide for a beginning and as the Superintendent is not only an intelligent and capable physician, but an enthusiast on the subject, I feel confident that it will succeed.

As the competency of our physicians is of the highest importance to the public health anything bearing upon our medical license law is of interest to us. During the session of the Legislature bills for the relief of physicians in Cherokee, Clay and Graham counties and in Chatham county were enacted into law.

In the one case physicians having diplomas were allowed to practice without license until May 1, 1909, and in the other simply to stand the examination for license without exhibiting a diploma. The reasons given for this legislation was the same in both cases—that in the remote, sparsely settled and physically rough regions physicians so well educated as to meet the requirements of our very high standard had not settled and that unless such action was taken the people in the affected localities would be without medical aid. While actively opposing the first named bill, for fear that it might be an entering wedge threatening the integrity of our license law, I could not deny the facts, nor in my own mind deny the inherent reasonableness of the contention in the light of those facts. It was indeed the realization of what we have been anticipating and I was thoroughly impressed with the importance of devising some method of practically lowering the standard to meet such conditions, lest our license law should be emasculated in the near future.

As a means to this end I approved, as Chairman of the Society's Committee on Legislation, the passage of a bill authorizing the Board of Medical Examiners to reciprocate with other States *in their discretion.* I welcomed this bill the more gladly because it enabled me to secure the voluntary suppression by its author of another bill requiring the Board of Examiners to grant a license to any one presenting a diploma from a member of the American Association of Medical Colleges and a license from *any* State. As the standard of some states is extremely low and in nearly all lower than our own the passage of this bill would have practically repealed our license law and have undone the work of fifty years for the elevation of our profession and the protection of the people against incompetent physicians. Before the present meeting of the Board of Examiners I addressed a circular letter to each member of the same calling their attention to the condition above set forth and to the importance of action on their part to meet them as far as possible, suggesting reciprocation with the low standard states where the conditions for this concession demanded it and also that it would probably be well to lessen the rigor of the examination somewhat, by granting certificates on the branches passed and thereby encourage men to come again a second time and finish up successfully rather than give up in despair and take the chances of practicing illegally. I was, therefore, much gratified to learn from President Kent, who stopped over in Raleigh on his way to the meeting for the purpose that he had secured from the Assistant Attorney General an opinion to the effect that it would be legal for his Board to grant a license and require the recipient to sign a contract to restrict his practice to a certain county, or section, the Assistant Attorney General writing out the form of said conract. The judicious use of this privilege will, I think, solve the problem.

SMALLPOX.

I am very glad to state that smallpox has been very much less prevalent. In 1905 the total number of cases was 7,375 with 31 deaths, in 1906, 6,049 cases and 17 deaths, while during the year ending May 1, 1907, the total number of cases was only 1,900 with 6 deaths. The following is a tabulated statement of the disease by counties.

SMALLPOX REPORT—FROM MAY 1, 1906 TO MAY 1, 1907.

Counties.	Number of Cases			Number of Deaths.		
	White.	Colored.	Total.	White.	Colored.	Total.
Alamance	24	74	98			
Anson	10	10	20			
*Ashe	15		15			
Bertie	5	11	16			
*Bladen	12	3	15			
*Brunswick	5	30	35		2	2
Cabarrus	1	6	7			
Carteret	2		2			
Catawba	1		1			
Chatham	12	15	27			
Cherokee	2	1	3			
*Chowan	100	200	300			
Cleveland	4		4			
Columbus	1	1	2			
Cumberland	19	4	23			
Currituck	22	7	29			
Davidson	6		6			
Duplin		12	12			
Durham	64	50	114			
Forsyth	24		24			
*Franklin	9	91	100			
Gaston	10	4	14			
Granville	2	5	7			
Guilford	5	94	99			
Halifax	2	1	3			
Harnett	18	4	22	1		1
Hertford	15	30	45		1	1
Lincoln	17		17	1		1
Martin	20	100	120			
Mecklenburg	4	4	8			
Moore	4	23	27			
Nash	10		10			
New Hanover		1	1			
Northampton		3	3			
Orange	25		25			
Person		1	1			
Pitt	13		13			
Randolph	26	65	91			
*Richmond	7	6	13			
Robeson	10		10			
Rowan	3	2	5			
Rutherford	4		4			
Stanly		1	1			
Vance	8	5	13			
Wake	67	272	339			
Warren	4	2	6			
*Washington	8	20	28			
Wayne		190	190		1	1
Total in 48 counties	620	1348	1968	2	4	6
Death rate per cent			.003	.003	.003	.003

*Estimated.

Resolved, by the North Caorlina Board of Health and the Medical Society of the State of North Carolina in conjoint session assembled:

1. That as the special custodians of the health and lives of our people they desire to place on record their appreciation of the generous assistance in preventing disease given by the State Board of Agriculture in the use of its laboratory, including the services of its bacteriologist, for making analyses of drinking water suspected of causing typhoid fever, and other hygienic analyses, bearing all the expenses for two years and fully half for four years more, until funds could be secured for its support.

2. That the benefit to our people in the prevention of typhoid fever alone has, if computed in terms of dollars, exceeded many times over the amount expended, and they owe a debt of gratitude to the Board of Agriculture that should ever be remembered.

3. That these resolutions be spread upon our records and that a copy be sent to the Commissioner of Agriculture with the request that he transmit it to his Board at its next meeting.

MINUTES OF THE NORTH CAROLINA ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS, MOREHEAD MEETING, 1907.

The second annual meeting of the North Carolina Association for the Prevention of Tuberculosis was held at Morehead City on June 12, 1907. President M. L. Stevens was in the chair. There were present about twenty members. The minutes of the last meeting were read and approved. The President read a report of the work accomplished during the past year. Upon motion, the report was accepted.

Dr. Templeton moved that the present officers of the Association be re-elected for the roming year. The motion was carried.

Dr. Benj. K. Hays was elected delegate to the National and International Association to be held in Washington City next year; Dr. I. M. Taylor, alternate.

A committee, composed of Drs. J. Howell Way, C. M. Pool and J. R. Williams was appointed to solicit membership.

A time for holding the meetings of the Association was discussed. Dr. Way suggested that the Secretary arrange with

the Secretary of the State Medical Society for an hour (or more) of the time of that body. Upon motion, this was carried.

There being no further business, the Association adjourned.

BENJ. K. HAYS,
Secretary.

At the Charlotte meeting of the State Medical Society, a committee was appointed, consisting of Drs. Way, Parrott, Albert Anderson and D. A. Stanton, to act on the suggestion made by the President in his address. Through Senator Pharr, of Mecklenburg County, these gentlemen undertook to pass the following:

A BILL TO BE ENTITLED AN ACT TO AMEND SECTION 4498 OF THE REVISAL OF 1905, OF NORTH CAROLINA, RELATIVE TO APPLICANTS FOR LICENSE TO PRACTICE MEDICINE.

The General Assembly of North Carolina do enact:

SECTION 1. That section 4498 of The Revisal of 1905 be, and the same is hereby, amended by adding to said section the following: *Provided*, that it shall be the duty of said board to examine only those applicants who shall present satisfactory evidence of a preliminary education equal to the entrance requirements of the University or reputable colleges of this State, as shown by such certificates as said University and colleges accept, or by a similar certificate from the superintendent of public instruction of some county in the State, after due examination, for which examination the said Superintendent shall be paid by the applicant a fee of three dollars.

SEC. 2. This act shall be in force from and after its ratification.

The bill was introduced. There was some little opposition to it, and Mr. Pharr withdrew it, and did not take it up again, and let it die. This bill was endorsed by the Chairman of the Legislative Committee, as well as this special committee, appointed by the Chairman of the North Carolina State Medical Society.

A similar bill to this was passed for the trained nurses of the State. It is getting to be an inconsistent state of affairs when the medical profession of the State can not have a preliminary educational standard equal to that of the nurses. Or, in other words, a nurse must be better educated, to begin the study of her calling, than a physician is, to commence his professional studies.

A great many other States have a preliminary educational requirement. North Carolina has none. The men who introduced this proposed Bill are men who do not give up, whenever they undertake a thing. The matter will be brought up again at the next Legislature.

The following was presented by the President-elect, Dr. J. Howell Way, of Waynesville, and amid much enthusiasm, unanimously adopted, and ordered printed in the volume of proceedings:

Morehead City—Alluring Morehead, Attractive Morehead, Bewitching Morehead, Charming Morehead, Fascinating Morehead, Lovely Morehead, Morehead the peerless; Morehead the beautiful beyond compare; Morehead, the undisputed Queen of the Atlantic Coast resorts; Morehead, the enticing "summer capital," not only of the Carolinas, but also that of the charming sisterhood of Southern States.

We, the representatives of the North Carolinas Medical profession and members of the State Medical Society, with our wives, sweethearts and friends in fifty-fourth annual session assembled, and after having enjoyed to the fullest extent the many charms of the ocean side, the balmy, health-giving sea breezes, the delightful sails, the appetizingly choice and exquisitely prepared sea-food which has in such plethoric abundance graced the tables at meal time, the most excellent and accommodating at-all-hours service, and last and best, the princely hospitality of the genial proprietor of the Atlantic Hotel, Col. Frank P. Morton, desire to extend to him our appreciative thanks for his many kindly attentions and congratulate both him and the local committee, Drs. R. S. Primrose, Francis Duffy, N. M. Gibbs, W. E. Headen, K. P. B. Bonner, Charles Duncan, along with Hon. W. L. Arendell, whose gracious words of welcome yet reverberate upon our tympani, upon the unqualified success of their many efforts in ministering so satisfactorily to our pleasures and our comforts.

The fifty-fourth annual session of our grand old State Society passes into history as one of its most pleasant and successful.

We leave you with genuine regret, and carry to our homes most felicitous remembrance coupled with the fond expectance that we may soon return to once more enjoy the many delights of captivating Morehead.

We thank you, we thank you.

HOUSE OF DELEGATES.

Minutes of the Fourth Annual Session Held in Morehead City, June 11-13, 1907.

The fourth annual session of the House of Delegates of the Medical Society of the State of North Carolina was called to order in the parlors of the hotel at Morehead City by the president, Dr. S. D. Booth, Oxford, N. C., June 11, 2:30 p. m.

The Secretary was asked to call the roll by counties and it was found that eighty-five had reported and elected delegates to the 54th annual session of State Society.

The roll of Councilors was called and the following Councilors answered to their names:

First District—Dr. Oscar McMullan, Elizabeth City. Absent.
Second District—Dr. Jas. M. Parrott, Kinston. Present.
Third District—Dr. Frank H. Russell, Wilmington. Present.
Fourth District—Dr. Albert Anderson, Wilson (now Raleigh). Present.
Fifth District—Dr. J. F. Highsmith, Fayetteville. Present.
Sixth District—Dr. H. A. Royster, Raleigh. Present.
Seventh District—Dr. E. C. Register, Charlotte. Present.
Eighth District—Dr. J. B. Smith, Pilot Mountain. Absent.
Ninth District—Dr. Thomas E. Anderson, Statesville. Present.
Tenth District—Dr. Jas. A. Burroughs, Asheville. Absent.

The following delegates represented the counties reported:

FIRST DISTRICT.

Currituck—
Pasquotank-Camden-Dare—Dr. Oscar McMullan.
Perquimans—(All members in good standing.)
Gates—
Washington—Dr. W. H. Ward.
Chowan—Not organized.
Tyrrell—Not organized.
Hyde—Dr. E. H. Jones.

SECOND DISTRICT.

Hertford—Dr. J. H. Mitchell.
Martin—Dr. M. I. Fleming.
Pitt—Dr. J. E. Noble.
Bertie—Dr. Wayland Mitchell.
Beaufort—
Lenoir—Dr. W. F. Hargrove.
Jones—
Craven—Dr. R. S. Primrose.
Pamlico—
Carteret—Dr. L. C. Adams.

THIRD DISTRICT.

New Hanover—Dr. Chas. T. Harper.
Pender—
Onslow—Dr. E. L. Cox.
Duplin—
Bladen—
Sampson—Dr. J. O. Matthews.
Columbus—Dr. H. B. Maxwell.
Brunswick—

FOURTH DISTRICT.

Northampton—Dr. M. Bolton.
Halifax—
Nash—
Edgecombe—Dr. J. M. Baker.
Johnston—Dr. J. J. Young.
Wilson—Dr. E. T. Dickinson.
Wayne—Dr. W. H. H. Cobb.
Greene—Dr. W. B. Murphy.

FIFTH DISTRICT.

Cumberland—Dr. J. F. Highsmith.
Robeson—Dr. J. L. McMillan.
Scotland—Dr. K. A. Blue.
Richmond—Dr. L. D. McPhail.
Montgomery—Dr. J. B. Shamburger.
Moore—
Harnett—Dr. H. H. Utley.

SIXTH DISTRICT.

Chatham—
Wake—Dr. Ralph Stephens.
Franklin—Dr. R. F. Yarborough.
Warren—

Vance—Dr. F. R. Harris.
Granville—Dr. Benj. K. Hays.
Person—
Caswell—Dr. M. H. McBryde.
Alamance—Dr. Geo. W. Long.
Orange—
Durham—

SEVENTH DISTRICT.

Anson—
Union—Dr. J. M. Blair.
Stanly—Dr. T. A. Hathcock.
Mecklenburg—Dr. E. C. Register.
Cabarrus—Dr. L. M. Archey.
Lincoln—Dr. C. D. Thompson.
Gaston—Dr. D. A. Garrison.
Cleveland—Dr. W. F. Mitchell.
Rutherford—Dr. W. A. Thompson.

EIGHTH DISTRICT.

Rockingham—Dr. John Sweeney.
Guilford—Drs. J. R. Reitzel and M. F. Fox.
Randolph—
Forsyth—Dr. W. O. Spencer.
Stokes—
Surry—Dr. S. T. Flippin.
Yadkin—Dr. W. B. Fassett.
Alleghany—
Wilkes—Dr. J. Q. Myers.
Ashe—

NINTH DISTRICT.

Davidson—Dr. C. A. Julian.
Davie—Dr. J. W. Rodwell.
Rowan—Dr. W. W. McKenzie.
Iredell-Alexander—Dr. E. M. Younts.
Catawba—Dr. H. C. Menzie.
Caldwell—Dr. A. A. Kent.
Watauga—
Mitchell—Dr. G. C. Bryan.
Burke—Dr. I. M. Taylor.

TENTH DISTRICT.

Buncombe—Drs. H. H. Briggs and T. E. W. Brown.
Yancey—
McDowell—Dr. M. F. Morphew.
Madison—Dr. W. F. Robinson.
Polk-Henderson—Dr. J. G. Waldrop.

Haywood—Dr. J. R. McCracken.
Transylvania—
Jackson—Dr. A. A. Nichols.
Swain—Dr. J. H. Teague.
Macon-Clay—Dr. S. H. Lyle.
Graham—
Cherokee—

After the roll had been called and a note made of the gentlemen responding to same, the House of Delegates was declared open and ready for business.

The motion made at the Charlotte meeting, 1906, to elect a Reading Clerk was taken up.

Dr. Hays moved to adopt the motion.

Dr. Cobb made a motion to table the resolution.

After some discussion a vote was taken and the resolution to elect a Reading Clerk was lost.

A motion was passed to take a recess of five minutes for the delegates from the various Districts to get together and elect a representative on the Nominating Committee from each District.

The selection was as follows:

First District—Dr. W. H. Ward.
Second District—Dr. J. C. Rodman.
Third District—Dr. Chas. T. Harper.
Fourth District—Dr. W. H. H. Cobb.
Fifth District—Dr. J. F. Highsmith.
Sixth District—Dr. Geo. W. Long.
Seventh District—Dr. E. C. Register.
Eighth District—Dr. F. M. Fox.
Ninth District—Dr. W. W. McKenzie.
Tenth District—Dr. T. E. W. Brown.

On motion the report of the Secretary was unanimously adopted.

On motion the result of the delegates in selecting the Nominating Committee was approved. The Nominating Committee organized for work by electing Dr. E. C. Register, Chairman.

The House of Delegates then adjourned till Wednesday morning, June 12, 9:30.

Wednesday Morning, June 12, 1907.

The House of Delegates was called to order at 9:30 o'clock, President Booth in the chair.

On motion Dr. A. H. Caviness, of Moore County, alternate, was seated in place of the regular appointed delegate.

The nomination that the Society meet in Asheville was reconsidered, and, after much discussion a vote was taken and Winston selected as the place of meeting in 1908.

Dr. Whitaker moved to take up the resolution to change a clause in the constitution.

The motion was referred to Dr. Cobb for a ruling as to whether this could be done after the matter was disposed of on the preceding day.

Dr. Cobb ruled that it could not.

A spirited discussion followed and after several members had expressed themselves as anxious to vote against the amendment to elect a Reading Clerk, a vote was taken and the resolution was lost.

The Nominating Committee made the following nominations:

President—Dr. J. Howell Way, Waynesville.
First Vice-President—Dr. J. E. Stokes, Salisbury.
Second Vice-President—Dr. J. A. Turner, High Point.
Third Vice-President—Dr. Nixon Edwards, Beaufort.
Orator—Dr. Chas. Mangum, Chapel Hill.
Essayist—Dr. Thomas R. Little, Greensboro.
Leader of Debate—Dr. S. E. Koonce, Wilmington.

COUNCILORS.

First District—Dr. Osear McMullan, Elizabeth City.
Second District—Dr. R. A. Whitaker, Kinston.
Third District—Dr. F. H. Russell, Wilmington.
Fourth District—Dr. Albert Anderson, Wilson (now Raleigh).
Fifth District—Dr. J. F. Highsmith, Fayetteville.
Sixth District—Dr. H. A. Royster, Raleigh.
Seventh District—Dr. C. M. Strong, Charlotte.
Eighth District—Dr. J. B. Smith, Pilot Mountain.
Ninth District—Dr. I. M. Taylor, Morganton.
Tenth District—Dr. J. A. Burroughs, Asheville.

Delegates to American Medical Association—Dr. J. F. Highsmith, Fayetteville; Dr. P. J. Thomas, Wilmington; Dr. A. J. Crowell, Charlotte. *Alternates*—Drs. J. Ackerman and E. R. Russell.

Legislative Committee—Drs. J. Howell Way, R. H. Lewis, H. A. Royster, J. E. Brooks, D. A. Stanton.

Publication Committee—Drs. E. C. Register, W. H. Wakefield, D. A. Stanton.

Scientific Committee—Drs. E. J. Wood and J. C. Rodman.

Committee on Finance—Dr. R. W. Smith, Hertford; Dr. W. A. Monroe, Sanford, Dr. D. A. Garrison, Bessemer City.

Obituary Committee—Drs. C. A. Julian, Benj. K. Hays, R. L. Gibbon.

Delegates to Mississippi Valley Medical Association—Drs. W. H. H. Cobb, Charles Robinson, Geo. W. Long, W. W. McKenzie, E. G. Moore, G. T. Sykes.

Delegates to Virginia Medical Association—Drs. W. H. Ward, D. T. Tayloe, W. A. Graham, R. S. Primrose, J. M. Blair.

Delegates to South Carolina Medical Association—Drs. T. E. Anderson, Albert Anderson, P. A. Nicholson, Jas. A. Burroughs, J. M. Baker.

North Carolina Board of Health—Drs. David T. Tayloe, Jas. A. Burroughs.

Chairman Committee of Arrangements—Dr. W. O. Spencer, Winston.

Motion was made and seconded that the Society install the President-elect for the ensuing year. Carried.

President Booth designated Drs. Thos. E. Anderson and David T. Tayloe a committee to present the President-elect, Dr. J. Howell Way of Waynesville.

The committee escorted Dr. Way to the platform and presented him to President Booth, who introduced him to the Society in a few well-chosen words and tendered him the gavel.

Dr. Way then briefly addressed the Society as follows [see page 349].

The following Chairmen of Sections for 1908 Session was announced by President-elect, Dr. J. Howell Way.

Anatomy and Surgery—Dr. Joshua Tayloe, Washington.

Materia Medica and Therapeutics—Dr. L. N. Glenn, McAdensville.

Practice of Medicine—Dr. L. B. McBrayer, Asheville.

Physiology and Chemistry—Dr. E. T. Dickinson, Wilson.

Obstetrics—Dr. Chas. T. Harper, Wilmington.

Gynæcology and Abdominal Surgery—Dr. J. F. Highsmith, Fayetteville.

Medical Jurisprudence—Dr. Isaac M. Taylor, Morganton.

Pathology and Microscopy—Dr. Benj. K. Hays, Oxford.
Railway Surgery—Dr. C. A. Julian, Thomasville.
Pædiatrics—Dr. W. W. McKenzie, Salisbury.

On motion, the House of Delegates adjourned till Thursday afternoon.

THURSDAY—Afternoon Session.

Thursday Afternoon, June 13, 1907.

The House of Delegates met on call of the President at 3:30. Committee on Finance made the following report:

We, your Finance Committee, beg leave to submit the following report after auditing the books of the Treasurer:

Received from retiring Treasurer	$1,644.56
Dues collected to date	1,838.50
Total	$3,483.06
Disbursements to date	1,570.76
Balance on hand	$1,912.30

Respectfully,

J. T. J. Battle,
Francis Duffy.
Committee.

June 13th, 1907.

We find upon investigation the following County Societies behind one or more years in their annual dues, viz: Ashe, 5 members; Beaufort, 19 members; Chatham, 4 members; Cherokee and Graham, 10 members; Durham, 25 members; Forsyth, 31 members; Halifax, 11 members; Haywood, 12 members; Orange, 10 members; Pasquotank, Camden and Dare, 17 members; Pender, 5 members; Perquimans, 5 members; Pitt, 21 members; Transylvania, 11 members; Warren, 5 members; Yancey, 5 members. Total, 209 members.

Since the session at Morehead City the following counties have reported and paid their dues: Yancey County, Pitt County, Perquimans County, Pender County, Pasquotank, Camden and Dare Counties, Haywood County, Forsyth County, Cherokee and Graham Counties, Chatham County, Beaufort County.

There being no further business, the House of Delegates adjourned *sine die*.

REPORT OF THE

BOARD OF MEDICAL EXAMINERS

OF THE

STATE OF NORTH CAROLINA,

Morehead City, N. C., June 5, 1907.

Questions asked by the Board at the 1907 meeting.

OBSTETRICS AND GYNÆCOLOGY.

BY A. A. KENT, M. D., LENOIR, N. C.

1. Given: Primipara at end of 8th month of pregnancy, considerable œdema of the face, feet and legs, urine scant in quantity, slight cephalalgia, dimness of vision, anæmic, weak, short of breath upon slight exertion, pulse fast and weak; (a) give diagnosis; (b) what grave symptom might be expected to follow if patient is not properly treated; (c) briefly outline treatment.

2. During normal labor (a) how and by means of what action is the dilation of the cervix brought about? (b) what forces are employed in the stage of expulsion?

3. Give diagnostic symptoms of Placenta Previa.

4. How would you treat a case of Adherent Placenta?

5. Prescribe for a case of Pruritus Vulvæ.

6. Name three causes for which you would curette the uterus, and state in which you would use the dull and in which the sharp curette.

7. In Ventral Fixation, (a) what organ is fixed, (b) for what purpose is it fixed, (c) to what (anatomically) is it fixed, (d) what kind of sutures should be used?

8. How would you treat a case of Congenital Atresia of the Cervix?

Sign Pledge.

ANATOMY.

BY JAMES M. PARROTT, M. D., KINSTON, N. C.

1. Describe the pubic or pectineal bone.

2. Name the ligaments of the elbow joint (humerus with ulna and radius.)

3. Give the relations of the deep palmar arch.

4. Name the divisions of the 5th (Trigeminus) pair of cranial nerves and mention in a general way the parts supplied by each (motor, sensory, etc.

5. Give the boundaries of the inguinal canal.
6. Describe the cœcum.
7. Name the contents of the submaxillary triangle and give its boundaries.
8. Mention the hepatic fissures, name the structures found in each and the lobes separated by each.
9. Describe the prostate gland (do not give its relations or its histology.)
10. Name the structures cut in performing a tracheotomy above the isthmus of the thyroid.

N. B. Answer only 8 questions.

Pledge.

MATERIA MEDICA.

BY FRANK H. RUSSELL, M.D., WILMINGTON, N. C.

1. Name and describe the methods of introducing medicine into circulation.
2. Name an example of (a) an alterative, (b) anti-periodic, (c) antispasmodic, (d) diaphoretic, (e) diuretic.
3. Name the alkaloids of hyoscyamus—doses.
4. What are the uses of the bromides?
5. Name the preparations and doses of arsenic.
6. What is the dose of (a) Ol. terebinthinæ, (b) Tinct. veratrum viride, (c) Basham's mixture, (d) tincture of aconite, (e) caffein citrate, (f) sparteine sulphate?
7. Why is atrophine often combined with morphine when the latter is used?
8. Name three drugs most useful in the treatment of intermittent fever.
9. Write a prescription for an adult with bronchitis, containing 3 ingredients.
10. Criticise the following prescription:

Px Argenti Nitratis grr xx,
Sodi Chloridi zl,
Aqua z2.
Sig. zl every 4 hours.

SURGERY.

BY CHAS. O'H. LAUGHINHOUSE, GREENVILLE, N. C.

1. Give symptoms and treatment of Anal Fissure.
2. Give diagnosis of Strangulated Hernia.
3. Give differential diagnosis between Hydrocele and Inguinal Hernia.
4. Give diagnostic characteristics of Syphilitic Skin Eruptions.
5. In Hœmorrhage of Superficial Palmar Arch, which end of the bleeding vessel would you tie?
6. Give œtiology of Hydro-Nephrosis.

7. Give diagnosis of Mastoid Disease.
8. Give indications for Intubation of Larynx.
9. In an injured elbow, what signs would verify fracture of Internal Condyle?
10. What conditions associated with loss of consciousness must be differentiated from traumatic Intra-Cranial lesions?

Sign pledge.

CHEMISTRY AND DISEASES OF CHILDREN.

G. T. SIKES, M.D., GRISSOM, N. C.

1. Define an Atom.
   - *a* How always found.
   - *b* What is taken as the standard.
2. Define a Symbol.
   - *a* Also a coefficient.
   - *b* What does each represent?
3. Define a Metal.
   - *a* How many are known?
   - *b* Name the noted exception.
4. What is a thermometer?
   - *a* How is it made?
   - *b* Name the standard brands.
5. What is a Blood Corpuscle?
   - *a* How many kinds?
   - *b* What is the colo due?
6. Define Dentition.
   - *a* At what age does it appear?
   - *b* Name some of its disturbances.
7. What is Opthalmia Neonatarum?
   - *a* Whence derived?
   - *b* Give treatment.
8. Define Exanthemotous Fever.
   - *a* Name three.
   - *b* What ages are exempt?
9. What is Diarrhœa?
   - *a* Acute Inflammatory?
   - *b* Treatment?
10. Define Rachitis.
    - *a* Who most subject to it?
    - *b* How long do the effects last?

PHYSIOLOGY AND HYGIENE.

J. T. J. BATTLE, M.D., GREENSBORO, N. C.

1. Describe a complete physiological revolution of the heart; fœtal and adult.
2. Give origin of salivary and gastric secretions and function of each.

3. Give function of pancreatic and intestinal secretions.
4. Through what media is the blood relieved of effete material and provided with new?
5. How is the blood current maintained and what arteries carry venous blood?
6. What is the function of the cerebellum?
7. If 7 seconds cranial nerve were incised at its exit from stylo-mastoid foramen state briefly the result.
8. Give function of Pneumogastric nerve as related to respiration.
9. Detail uses of the largest gland in the body.
10. What occupations cause a pedisposition to pulmonary diseases?

EXAMINATION ON PRACTICE OF MEDICINE.

BY M. H. FLETCHER, ASHEVILLE, N. C.

No. 1. Give symptoms of diagnostic value in the first and second week of typhoid fever.

No. 2. Give differential diagnosis between Primary Lobar Pneumonia and Acute Pneumonic Phthisis.

No. 3. Give Causes and Treatment of Chronic Dysentery.

No. 4. Define Leukemia, Addison's Disease, Myxedema, Brachycardia.

No. 5. Give symptoms and signs Aneurysm of the Abdominal Aorta.

No. 6. Give symptoms of Acute Intestinal Obstruction.

No. 7. Give differential diagnosis between Uraemia, Alcoholic Coma, and Cerebral Hemorrhage.

No. 8. Give definition and etiology of Thrombosis in the Brain.

No. 9. Write one, and only one Rx. for Chronic Constipation.

No. 10. Describe the most important symptoms of Cerebro Spinal Meningitis.

Sign pledge.

REPORT OF THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA, MOREHEAD CITY, JUNE 5, 1907.

The Board of Medical Examiners met in Morehead City, June 5, 1907. One hundred and thirty-two applicants for license registered; of this number one hundred and twelve made the required grade and were granted license.

The names and address of the successful applicants are as follows:

Number.	Name.	Address.	College of Graduation.	Year.	Average Grade.
1	William Hopton Smith	Goldsboro	University Pennsylvania	1906	91 5/14
2	Emory Graham Alexander	Charlotte	Jefferson Medical College	1904	89 13/14
3	Robert Frederick Lineback	Winston-Salem	University Pennsylvania	1907	96
4	Israel Wallace Mayerburg	Goldsboro	University Pennsylvania	1907	91 3/7
5	Charles Edward Moore	Moore's Springs	Jefferson Medical College	1907	95 4/7
6	Frederick Dacosta Austin	Charlotte	North Carolina Medical College	1907	89 5/7
7	Henry Norris	Rutherfordton	University Pennsylvania	1906	87 2/7
8	Montgomery H. Biggs	Hinsdale, Ill	University Pennsylvania	1897	92 2/7
9	Robert Edgar Rhyne	Gastonia	North Carolina Medical College	1907	80 6/7
10			North Carolina Medical College	1907	74 6/7
11	Slade Alvah Smith	Elkton	North Carolina Medical College	1907	85 5/7
12	Houston Boyd Hyatt	Clinton	University Maryland	1907	91 5/7
13	John Sidney Hood	Charlotte	Jefferson Medical College	1907	87 4/7
14	James Edward Hobgood	Oxford	Jefferson Medical College	1907	87 3/7
15	Alfred Joseph Toulon	Whittier	Medico Chirurgical College, Philadelphia	1906	80 11/14
16	William Wade Olive	Apex	University Maryland	1906	93
17	John Kirkland Ross	Charlotte	Jefferson Medical College	1907	87 4/7
18	Benjamin Joseph Willingham	Hope Mills	Medical College of Virginia	1906	84 5/7
19	John Brewer Powers	Wake Forest	Coll. P. and S. Columbia University, N. Y.	1907	86 4/7
20			University Maryland	1907	78 13/14

21	John Knox, Jr	Lumberton	University Maryland	1906	89 1/7
22	Julius J. Barefoot	Wilson	University North Carolina	1907	87 1/2
23	William W. McDonald	Pee Dee	Vanderbilt University	1905	88 6/7
24	Julius Vance Dick	Whitsett	University North Carolina	1907	90 3/7
25	Spencer Piper Bass	Tarboro	University Virginia	1906	92 3/4
26	John A. Ferrell	Clinton	University North Carolina	1902	95
27	Henry Blount Best	Wilson	University North Carolina	1907	87 6/7
28	Thomas H. Cox	Hertford	University Maryland	1885	82 1/7
29	Fonsa Butler Watkins	Rutherfordton	Jefferson Medical College	1907	94 1/7
30	Addie W. Edwards	Gilkey	Grant's University, Atlanta C. and S.	1907	82
31	Gaston B. Justice	Marion	Physicians and Surgeons, Atlanta	1907	86 2/7
32	Henry Owen Easley	Boardman	University Virginia	1904	83 5/14
33	Thomas H. Woolsey	Greenville, Tenn	University Tennessee	1900	81 5/7
34	Ivey Alpheus Wood	Ryland	University North Carolina	1907	85 1/7
35	William B. W. Howe, Jr	Spartanburg, S. C	Medical College of South Carolina	1906	90
36	Philip Samuel Easley	Black Walnut, Va	North Carolina Medical College	1907	93
37	Killian A. Price	Gilbert, S. C	University Virginia	1907	90 5/7
38	Leaman Baggett	Dunn, Va	North Carolina Medical College	1907	80 1/7
39	Joseph B. Smart	Ellenboro	Grant's University, Richmond, Va	1900	80 2/7
40	Asbury Sullivan Nichols	Sylva	Tennessee Medical College	1906	91 5/7
41	Larrin B. Ohlinger	Balsam	West Pennsylvania Medical College	1900	87 1/7
42	Arnold Stovall	Madison, Ga	Medico Chirurgical College, Philadelphia	1904	81
43	Numa Duncan Bitting	Rural Hall	Jefferson Medical College	1907	87
44			University Tennessee	1905	77 1/14
45	Frederick Carlyle Hyatt	Waynesville	Jefferson Medical College	1907	93 9/14
46	Hunter W. Fisher, colored	Beaufort	Leonard Medical College	1907	88 2/7
47	Mitchell Harvey Hemill	Coshocton, O	Eclectic Medical Institute	1891	88 6/7
48	Henry Spencer Moore, colored	NewBern	Leonard Medical College	1907	80
49	Austin H. Thurber, colored	Wilmington	Leonard Medical College	1907	82 2/7
50	Peter Franklin Roberts	West Raleigh	Leonard Medical College	1907	84 2/7
51	William Thomas Bebee, colored	Washington	Howard University, Washington, D. C.	1906	82 2/7
52	Joseph Napoleon Mills, colored	Wilmington	Leonard Medical College	1907	82 2/7
53	Nathaniel E. Jackson, colored	Carthage	Leonard Medical College	1907	82 1/7
54	Alexander Arthur York	Linwood	Chattanooga Medical College	1907	80 1/7

REPORT OF BOARD OF EXAMINERS—Continued.

Number.	Name.	Address.	College of Graduation.	Year.	Average Grade.
55	Lovelace Brown Capehart, colored	Raleigh	Leonard Medical College	1907	88 4/7
56	William H. Bruce, colored	Henderson	Leonard Medical College	1807	82 1/7
57	Edward Womack Currie	Davidson	North Carolina Medical College	1807	92 4/7
58	William Mann, colored	Hertford	Leonard Medical College	1905	90 1/7
59	John Herbert Mathews	Mt. Pleasant	North Carolina Medical College	1907	91 3/7
60	Robert Sumner Holliday, colored	Fayetteville	Leonard Medical College	1905	86 5/7
61	Rigdon Osmond Dees	Grantsboro	University Maryland	1906	88 2/7
62	Cavassa J. Hubert Gaylord, colored	Roper	Leonard Medical College	1905	82 1/7
63	Ernest Monroe Perry	Louisburg	Coll. Physicians and Surgeons, Baltimore	1907	82 5/7
64	Joshua H. Wilson	Florence, S. C.	Mehary Medical College	1905	83 6/7
65			Leonard Medical College	1905	76 3/7
66	Charles Shober Grayson	High Point	George Washington University	1906	91 5/7
67			University North Carolina	1907	76 5/14
68	Percy Wingate Olive	Apex	College Physicians and Surgeons	1907	88 1/7
69			Tennessee Medical College	1902	68 5/7
70	Charles A. Peterson	Relief	North Carolina Medical College	1907	89 2/7
71	John Harvey Hudson	Wrightsville	Coll. Physicians and Surgeons, Baltimore	1907	80 2/7
72			Maryland Medical College	1907	77 4/7
73	Emmett Wightman Gibbs Ivey		University North Carolina	1907	87
74	John Alexander Dowd	Eagle Springs	N. C. Medical and A. C., P. and G.	1902	82 2/7
75					78 6/7
76	Frederick Marshall Parker	West Durham			81 3/14
76	James Garrett Anderson	Asheville	University North Carolina	1806	80 1/7
78			University Tennessee	1907	78 4/7
79	Samuel T. Crowson	Statesville	University Tennessee	1903	82 5/7

80	Augustus Alexander McDonald	Pinehurst	North Carolina Medical College	1905	82
81	Robert P. Noble	Selma	University North Carolina	1907	88 1/2
82			University Maryland	1904	71 1/2
83	Elma Hall Adkins	Southport	University Maryland	1905	90 5/7
84	Albert Gideon Woodard	Princeton	University North Carolina	1907	91 1/7
85	Lois Boyd	Barium Springs	Womans Medical College, Baltimore	1907	92 1/14
86	James Mortimer Lynch	Nat. Sold. Home, Va	George Washington University	1905	89
87			Medical College Virginia	1905	76 5/7
88	Henry Gray Turner	Raleigh	University Pennsylvania	1906	90 3/14
89			North Carolina Medical College	1805	77 1/7
90	Edgar Hall Hand	Lowell	North Carolina Medical College	1907	85 1/7
91	O. F. Eckel	Edenburg, Ill	Medical College South Carolina	1907	80 5/7
92	Rufus G. Buckner	Asheville	Arkansas University	1897	86 6/7
93			North Carolina Medical College	1905	78 3/7
94	John Woodley Wallace	Huntersville	North Carolina Medical College	1907	87
95			Tennessee Medical College	1901	75 1/7
96			Hospital College, Louisville	1904	54 2/7
97	Elam Adolphus Drum	Richmond, Va	University College of Medicine	1907	91 2/7
98	Julius Edgar Duncan	Moravian Falls	University College of Medicine	1907	85 1/7
99	Eppie Clifton Powell	Auburn	University of Nashville	1907	84 1/7
100	Lemuel Edwin Guin	Unionville	North Carolina Medical College	1907	85 4/7
101			North Carolina Medical College	1907	74 3/7
102	Mark T. Frizzelle	Snow Hill	University College of Medicine	1907	89 1/7
103	John Waddell Warren	Edenton	University Coll. of Medicine, Richmond	1907	86 4/7
104	Richard Z. Query	Huntersville	University Coll. of Medicine, Richmond	1907	88
105	Clifton G. Harper	Menola	University Coll. of Medicine, Richmond	1907	85 2/7
106	Paul Clinton Brittle	Woodland	University Coll. of Medicine, Richmond	1907	87 4/7
107	James Rodolph Taylor	Kinston	University Coll. of Medicine, Richmond	1907	86 4/7
108	Paul Crumpler	Clinton	University Tennessee	1907	84 5/7
109	George S. Coleman	Elizabeth City	Medical College Virginia		81
110			University Coll. of Medicine, Richmond	1907	76
111	George Norfleet Harrell	Potecasi	University Coll. of Medicine, Richmond	1907	84 4/7
112	William Aldon Hoggard	Windsor	University Coll. of Medicine, Richmond	1907	91 9/14
113	James Claude Moore	Globe	University Coll. of Medicine, Richmond	1907	91 3/7

REPORT OF BOARD OF EXAMINERS—Continued.

Number.	Name.	Address.	College of Graduation.	Year.	Average Grade.
114	Paul Hayne Mitchell	Ahoskie	University Coll. of Medicine, Richmond	1907	82 3/4
115	Peter McLean	Laurinburg	University Maryland	1906	87 3/4
116	Cary Jeffrey Upchurch	Apex	University Maryland	1906	86 5/7
117			Kentucky University	1904	77 3/4
118	John Hamlet Merritt	Roxboro	University North Carolina	1906	85 1/4
119	Clarence Alfred Flowers	Cashsomer	Coll. Physicians and Surgeons, Baltimore	1905	83 3/4
120	Donald M. McIntosh	Old Fort	Medical College Virginia	1904	86
121	F. S. Packard	Warrenton	Medical School of Maine	1887	84 3/7
122	Arthur Graham Harris	Fairfield	University of the South	1905	86 1/7
123			Baltimore Medical College	1907	78
124			University of the South	1903	78 4/7
125	John Sullivan Clifford	Charlotte	George Washington University	1906	86 3/4
126	Richard Duffy	NewBern	Johns Hopkins	1906	94 5/7
127					54 4/5
128	Eugene Price Gray	Winston-Salem	Johns Hopkins	1906	90 3/4
129	Charles Torrence Nesbit	Wilmington	Baltimore Medical College	1893	91 1/4
130	James Walker Floyd	Liberty Hill, S. C	Medical College South Carolina	1900	82 1/9
131	Robert Bernard Slocum	Wilmington	Johns Hopkins	1905	90
132	John Franklin Reid	Concord			
133	W. James Robinson	Carter, Tenn	University Medical College	1994	

The President's Annual Address.

TUBERCULOSIS AND THE LAW.

By Samuel D. Booth, M.D., Oxford, N. C.

Gentlemen of the Medical Society of North Carolina:

It is needless for me to tell you that I count it a great honor to be chosen to preside over this body of men. It is needless for me to tell you that I count it an honor to have my name added to the list of names which stands for all that is best in modern civilization. The activity and progressiveness of the younger men in the medical profession in North Carolina have caused many of them to be called to this, the highest office within your gift. Right worthily has that honor been bestowed. And while my shoulder has ever been to the wheel; and while I have entered into the spirit of modern scientific medicine, yet I can not forget the grand old men whose forms and figures and dignified counsel have made such an impression upon me in the days of my youth. These men, armed with a knowledge of classical literature and the philosophy of the eighteenth century, fought disease, not as we of to-day from breastworks and artillery, but standing in the open, and in hand-to-hand conflict.

In my student days, Brown-Sequard was blazing the way for modern pathology, and Marion Sims who gave us the science of gynecology, was laying its foundation.

Anæsthesia, recently discovered, was enabling the elder Gross to do what we then thought marvels in surgery; and George B. Wood's work on the Practice of Medicine showed powers of observation and description which have never been surpassed.

In my early days the clinical thermometer, the hypodermic syringe and the stethoscope were unknown. Our microscopes were so crude that they were of little practical value, and the science of antiseptic surgery was unborn.

For forty years I have watched the progress of medicine step by step. My youthful faith in the curative powers of drugs has been largely shattered. I have seen the practice of bleeding pass almost entirely out of vogue. The blister, emetic and heroic dosage are less frequently used, and the crudely compounded mixtures of the older school have given way for the elegant preparations of the modern pharmacist. The science of Bacteriology has given us an insight into the causes of diseases undreamed of in my youth, and the microscope has caused the pathological changes of the remotest organs of the body to give up their secrets.

Hand in hand with our knowledge of their prevention, the value of Sanitary Law and of Preventive Medicine are no longer questioned. They are now recognized as the most important branches taught in our colleges; and with this knowledge we must frankly admit that the function of the physician is largely changed. He no longer confines himself to the combat of a single case of sickness at the bedside; it is his duty to study its cause, trace it to its sources and stamp it out of existence. To do this it is often necessary to call upon State and municipal authorities for aid. Those in power are, as a rule, either ignorant or indifferent. But the duty of a physician as a citizen is no less than his duty in the sick room. He must be an educator, and through education so influence public opinion that wise and beneficial health laws shall be enacted.

It is not sufficient that we draw up resolutions and, as a body, recommend specific legislation. Statutory laws when not backed by public opinion are worse than useless. But it is of the highest importance that we, as individuals, should resolve here and now to begin a house-to-house canvass of the entire State, and thereby so arouse public opinion that when the legislature of North Carolina again convenes members will find it to their political as well as their physical advantage to enact the laws which are here recommended.

It is not claiming too much to say that had no attention been paid to the advice of medical men civilization under modern conditions could not exist. Formerly an epidemic traveled no faster than moving bodies of men. An outbreak of smallpox, plague or cholera could spread no more rapidly than those fleeing from it could travel. At most this was only about forty miles a day; and as very few people travelled at all, epidemics were confined to a small area. The worst epidemics known to history were those which spread over Europe with the return of the armies of the crusaders. Were smallpox, cholera, plague or yellow fever unbridled to-day who could measure their ravages? A patient with one of these diseases would infect hotels, sleeping cars, and a thousand individuals from New York to San Francisco in three days' time. In a week the disease would become pandemic, and its ravages would not cease until modern methods of prevention were called into use. And yet in the face of the conditions which favor their spread the very diseases to which I have referred have become practically unknown in civilized countries.

It is with pardonable pride that we refer to the work of our profession in discovering the cause of yellow fever, and point the way to its extinction; to the cause of malaria and in lessening its frequency and virulence; to the cause of typhoid fever, diphtheria and other infectious diseases dependent upon unsanitary conditions, and in having them so circumscribed that they are no longer a menace to mankind.

But while much has been accomplished in this direction—so much in fact that within my memory six years have been added to the average of human life—let no man think that our work is done. It is only just begun, and all that I have said is only a prelude to the call to arms which I now make!

The specific fight for which I now ask you to enlist is *State and Municipal Legislation against Tuberculosis.* It is a titanic combat! It will require the expenditure of millions of dollars and years of unremitting toil. But when I remind

you that over two hundred thousand people in the United States fall victims to this disease every year, and that North Carolina contributes her proportion to the list of fatalities; and when I tell you that those who have given this subject the closest study have agreed among themselves that tuberculosis is a preventable disease—under such conditions as these surely no man will turn a deaf ear to this appeal.

Let us note briefly what has already been done. There are about fifty societies for the prevention of tuberculosis in the United States. Last year, at the meeting of this Society in Charlotte, "An Association for the Prevention of Tuberculosis" was organized in North Carolina with 18 names enrolled.

Later, a circular letter setting forth the object of this association and soliciting members was sent out to about five hundred doctors in the State. To this were 14 who responded. Through the munificence of a North Carolina doctor (whose name I am not at liberty to make known) every member of this association received during the past year "The Journal of Outdoor Life," a valuable publication devoted entirely to the prevention and cure of consumption.

It is gratifying to note that the last General Assembly of North Carolina made an appropriation of $20,000 for the erection of a sanitarium for the cure of consumptives. While this sum can be made to care for but a few of the large number of sufferers, still it is a step in the right direction.

There was a law also enacted to isolate tubercular prisoners, and this will remove a most frequent source of infection.

There is a "National Association for the Study and Prevention of Tuberculosis," with headquarters in New York City; and the New York City Charity Organization Society has a "Committee on the Prevention of Tuberculosis." Both of these Societies are very active, and have accomplished an immense amount of good.

While the medical profession of North Carolina has, as a whole, been backward in taking up this work, yet there are a

few individuals who have given much time and labor to this cause. The work of these men is better known outside of the State than at home.

Last year at a meeting of "The Conference of the State and Provincial Boards of Health of North America," which was held in Washington City, Dr. Richard H. Lewis, of our State, was the President. In the masterly address which Dr. Lewis delivered on that occasion (which I earnestly recommend to your careful perusal) he said: "The most stupendous problem which confronts the sanitarian is, admittedly, the prevention of tuberculosis." This problem, he thought, could best be met by "the education of the people through competent teachers, regularly employed for that business alone, working on a well-considered, thoroughly organized plan." He advised the employment of men to travel the State, giving lectures, scattering literature, and organizing local societies.

There are certain parts of North Carolina which have national reputation as health resorts. In these sections there have arisen men who are well known for their work in the cure and prevention of tuberculosis. Their writings are regarded as authoritative on this subject. From these, and from writers outside of the State on both sides of the Atlantic, we learn the same story, namely: that the most stupendous problem which our generation is called upon to face is how to prevent consumption. And from every quarter the answer is the same —we must have:

1. The hearty co-operation of the entire medical profession;
2. The laity educated and enlightened upon this subject;
3. Suitable legislation.

EXTEMPORANEOUS REMARKS.

These things can come only in the order mentioned. First the *doctor* must become interested in the subject; through him preachers, teachers, and leaders of thought generally must be reached; and through these collectively, public opinion aroused, and legislation therefrom enacted.

It is of vital importance that every consumptive should be

subject to certain restrictions which will prevent his giving the disease to others; and it is equally important that houses known to be the seat of infection should be subject to sanitary regulations.

To accomplish this the laws of North Carolina should require:

I. Every case of consumption should be registered.

II. Every consumptive should be required to conform to certain directions placed in his hands on printed cards by city or county health officials.

III. Every house in which a death from consumption has occurred should be disinfected.

IV. Houses in which consumptives reside, should be subject to monthly inspection.

V. All public buildings, such as schools, churches, court houses, theatres, etc., should be properly ventilated.

Gentlemen of the medical profession, I have done. As your president it is my duty to point the way of progress. The most of you have been born since I began the practice of medicine. To you I may seem an old man. Your technical training has been superior to mine. Whether bending your heads over a microscope, or exploring the recesses of the abdominal cavity, you are my superiors. But, if forty years' of experience, thought and observation count for anything; if the opinion of a man who for years has given this subject the most careful consideration, and who in the natural course of events must soon lay down his arms, can influence you to bring your minds to bear upon this great and all-important subject, I implore you, hear this, my last appeal: *Tuberculosis is not only a curse—it is a disgrace!*

Public opinion must be aroused! Legislation must be enacted! Sanitary laws must and shall prevail! And this work, done in the name of suffering humanity, can be accomplished in but one way, viz, by the individual efforts of the members of the Medical profession of North Carolina.

Annual Oration.

THE DOCTOR—A CALL TO THE HIGHER LIFE.

By L. B. McBrayer, M.D., Asheville, N. C.

Mr. President, Ladies and Gentlemen:

One can not mention an example of heroism that does not find its parallel in George Washington. Murat, in a paroxysm of passion, could spur all alone into the fire of a Russian battery; Washington did the same thing at Kipps Bay to shame his men into courage.

The world gazes with awe on Napoleon, rushing over the bridge of Arcola and planting his standard amid the storm of fire that swept it; Washington spurred up to the very muzzles of the enemy's guns at Princeton, and sat beneath his country's flag while the shot fell like rain about him.

Bonaparte, rallying his broken troops at Marengo, and rolling back the battle on the foe, presented a noble spectacle; but Washington doing the same thing at Monmouth under the burning sun of one of the hottest days ever witnessed in this country, was a noble one.

George Dewey is the hero of the Spanish-American war. When ordered to proceed at once from Hong Kong with his Asiatic squadron and find and destroy the Spanish fleet, he did not do as another commander, who had to resort to the courts to get what he claimed to be his rights and honors, answer that he could not go into the bay until the land forces should take the city and man the forts; destroyed the Spanish fleet, silenced the forts, captured the city and broke the backbone of the Spanish nation.

Julius Caesar was the greatest man of the Romans, or perhaps of all the ancient world. In every relation of life he obtained, apparently without effort, to the highest excellence;—as a citizen, as a politician, a man of letters, a general, a

statesman and an orator. Yet with all his victories there was one triumphant arch under which he was never allowed to pass —the arch of Pubes—and had it not been for the skilled hands of the obstetrician and surgeon who performed Caesarean section on his mother, he would never have seen the light of day—he would have died before he was born.

I could go on at length recounting the heroes of ancient and modern times and their deeds of valor, but will content myself with naming one other, the greatest of them all—THE DOCTOR.

It is a brave thing to stand or charge in the midst of a hail of bullets in defence of one's country; it takes a hero to throw himself in front of a moving train to save a human being from impending death; it is a noble thing to follow a bear into the mountain fastnesses and rescue a child from its embrace; it is an heroic thing to follow an eagle to the pinnacles and crags of the Rockies and rescue a babe from its talons; but it is more heroic to stand up and measure arms with the dark Angel of Death, and slowly, one by one, loosen his icy fingers from the throat of the lovely babe and restore it to its anxious mother's bosom.

The soldier is cheered on to deeds of valor by the elbow touch of his comrades, by the lively strains of martial music and the glitter and roar of musketry; at the same time he fears to disobey a command lest he be punished and disgraced. But when pestilence walks unseen in the midst of the people, slaying its victims in every house, visiting the altar and the office, the proud mansion of the aristocrat, and the mud hovel of the peasant,—it is then the physician passes by the sentry who strictly guards the quarantine and the door swings back on its hinges, as it will to admit none other, and he enters to fight the unseen but deadly foe, single handed and alone.

The warrior builds his throne on a pyramid of skulls and floats himself to glory on a sea of blood—but the physician delights not in such things. We follow in the warrior's wake

and bind up the cannon shots and sabre cuts which he makes. We staunch the blood of his bomb-mangled victims.

Could we induce ourselves to believe for a moment the sole mission of the physician to be the administration of pills and potions and to yield a servile obedience to the caprices of his patients (a bondage that dishonors and disgraces the name,) I would quit the practice of medicine before the sun shows his face above the eastern horizon of the morning; but we believe our profession to be that of a teacher of the laws of our being. Our college edifice is magnificent; aye, as extensive as the earth; our laboratory, whatever it contains; our pupils, mankind; our text-book, the page of nature. Then let us take the suggestion of the muse, as expressed in the following lines:

> And nature, the old nurse, took
> The child upon her knee,
> Saying, "Here is a story book
> Thy Father hath written for thee."
> "Come, wander with me," she said,
> "Into regions yet untrod;
> And read what is still unread
> In the manuscript of God."

Every one who enters our noble profession owes it to himself and to his confreres to be a success—and I do not use the word in the latter-day acceptation of the term, from a financial standpoint only; though I would not have you believe for a moment that I decry this standard altogether. It is my opinion, after mature deliberation, that the doctor is paid less in proportion to the value received, than any other man, be he laborer, artisan or professional man; for who can measure the value of a human life? And yet the doctor has no one to blame but himself. If the doctor says, as per bill rendered he is only worth so much, there are not many Americans who will insist that he is worth more. Let him make hiself worthy of the noble profession he has entered and render his bills accordingly, and there will usually be mutual satisfaction both on the part of himself and his patients.

Success is a relative term, and it has been truthfully said that there is a dignity in mediocrity as well as a dignity of greatness, and the best doctor is often the one of whom the public hears least. Each doctor has but one chance in one hundred thousand to become the leading physician of these United States, but one chance in two thousand to become the leading physician in this grand old State, but you have one chance in one anywhere to attain the happiest and most useful lot given to man; that is, to be a vigorous, whole-souled, intelligent, up-to-date physician.

"No physician has the right to consider himself as belonging to himself" is a saying attributed to Aristotle, and it has become a maxim, and is accepted as such by all the people. They expect from you the heroism of constant service, not the kind that does one flaring deed that makes men stare and shout, but the kind of courage regardless of personal risk that is never wanting. They expect you to give up days and nights, sleep and pleasure, to the battle with disease and vice, and when your personal happiness conflicts with this great ideal, they expect you to be consoled with the thought that the right to claim such happiness is as nothing compared with the privilege of resigning it. Are you the man that can adopt such a life of renunciation of your own free will and accord? You must be to become a successful physician. If not, it is not yet too late to turn back.

In order to be a successful physician you must be loyal—loyal to your profession, loyal to your patients, and loyal to yourself. Think how much of the accumulated knowledge of the centuries, laboriously compiled by the efforts of enthusiastic members of your profession who have gone before, is yours for the asking. Think how much of the experience, conclusions and ideas of the great men of our day as recorded in our books and journals, are at your command. Think how you may sit with the greatest men in our profession in this or other countries, and sip wisdom as it falls from their lips,

almost without money and without price. Think how the mantle of honor and respect falls upon your shoulders, even as the mantle of Elijah fell upon Elisha, as you enter the great profession of medicine. And when you think on these things, if you feel that the day will ever come when you will fail to be loyal to such a noble profession, I would say to you again, it is not yet too late to turn back.

Loyalty to your patients requires that you should extend to them sympathy and succor in their hours of sorrow, the cheerfulness that vanquishes despair, the skill that baffles even death itself. Serve whoever calls, for small fees or no fees, at all times and seasons, and the time will come when you can dictate terms and hours, and you can keep younger men around you who will be willing to work as you have worked. Your patients expect, and have a right to expect, even more than science and sympathy. You must be honest, honorable, courageous, and efficient—and you are all this, if you are giving them the best wisdom that is in you and the best knowledge available to you.

Loyalty to yourself demands that you so live and act that you will have self respect. You cannot then fail to have the respect of others. While as before stated your time is never your own, yet you must take time to keep posted, to read, to study, and thus keep abreast of the rapid advances in medicine. This is an age of progress; advancement is the watchword throughout the length and breadth of this broad land of ours. In manufacture, in educational systems, in financial schemes, in affairs of state and nation the onward march of progress is hailed with glad acclaim; but I say to you to-day, with a full belief that there is no one on this great continent or elsewhere who will rise up to say me nay, that the great medical profession is the vanguard of this onward march of progress; she has outstripped them all, she is marching on, conquering and to conquer. We have conquered smallpox, have vanquished the Klebs-Loofler bacillus of diphtheria,

wiped the dreadful scourge of yellow fever from the Island of Cuba and from the face of the earth, and have forced the retreat of the malaria carrying mosquito to the last ditch and cesspool. Puerperal fever, at one time more deadly than smallpox, is now seen mostly in text-books, thanks to the principles of asepsis. We have invaded the abdomen and tumors, extra-uterine pregnancy, pyosalpinx, appendicitis, volvulus, etc., etc., that have destroyed more lives than the combined armies of the world, and two score years ago existed only in the pipe-dreams of the most advanced thinkers, have been rendered innocent as suckling babes. While this is all true, yet Alexander's lament need not be ours, for though we have chained many a captive bacillus at our chariot wheels, there are many more left to conquer, and the doctor owes it to himself, whatever may be the economies he may find it necessary to practice, to provide himself with the latest books and read and study them, subscribe for two or more of the best journals and peruse them each week, for in no other way can he hope to keep abreast of a science that is advancing as rapidly as is the science of medicine. The great journals are the watchmen upon the walls; they are both the heralds and the advance guards of progress. They win their victories and move on to new battlefields before the text-books have learned that there has been a fight. If the doctor cannot be loyal to himself as just outlined, I would again say to him: It is not yet too late to turn back.

The practice of medicine—and I use the word in its most comprehensive meaning—is the grandest and greatest work in which man was ever allowed to engage. We work together with God in the saving of human life and the amelioration of human suffering. It is said that in the career of John Kepler, the great astronomer, when he discovered the laws of planetary motion, he was found in his study overcome with emotion, exulting in his triumph, and with tears of joy streaming down his face, he was heard to exclaim, "I think thy thoughts

after thee, O God." And so, when I see a woman in the throes of travail, with some abnormality that prevents the completion of the purpose as ordained by God, and see the surgeon and obstetrician hasten to relieve her by the use of the forceps or cæsarean section or other means, and see him save two human lives by one bold act; when I see the severed artery rapidly emptying the system of its life blood and see nature fail in every attempt to check the flow by coagulation, and then see the surgeon come to the rescue and deftly pick up the bleeding vessel and secure it with a ligature; when I stand by the bedside of a dying woman suffering from a ruptured tubal pregnancy and can see the rapid approach and even hear the rustling of the wings of the dark Angel of Death, only a few hours away at most, and then see the skillful hand of the surgeon open the abdomen, secure the bleeding vessel and drive away the dread messenger; when I see a typhoid perforation near the cæcal end of the ileum, with twelve inches of the intestines invaginated into the cæcum to protect the peritoneal cavity, and then nature's effort to do a resection by causing death and sloughing to relieve the obstruction of the bowels, and then see the steady hand of the surgeon open the abdomen, reduce the invagination, complete the resection, and save a human life; and when I see the laboratory worker, with his microscope and other instruments of precision for experimentation, securely hidden from the approving gaze of the applauding multitude, working out the formulae for the antitoxin that has become an antidote for the dreadful poison of diphtheria, and thereby saves thousands of innocent lives every year; when I see the student of yellow fever exposing himself to the ravages of this disease that he might save other human lives, and when after years of toil and study he works out the theory that yellow fever is communicated by the bite of a certain kind of mosquito a certain length of time after having sucked the blood of a patient suffering with the disease, and then to prove his theory beyond

the cavil of the most scrupulous, shuts himself up in a room with an infected mosquito and goes down to his death a martyr to the cause he believed in and worked to establish. Did I say a martyr, but like the lowly Galilean he gave himself a willing sacrifice that the many might be saved. If medals for heroic deeds are given, if a man's name is to be placed in the Hall of Fame for acts of noble worth, why should not the name of Dr. Jose W. Lazear receive these honors? And Dr. Lazear is not the first, neither will he be the last doctor to willingly lay down his life because the path of duty leads that way. I say, when I think on these things I feel like paraphrasing the words of the great astronomer, and saying, "I do thy works after thee, O God."

I have stood on the deck of a magnificent ship as it majestically sailed the sea, and witnessed the moon in all its splendor rise out of the mystery of the deep and shed its shimmering rays over the water like millions of diamonds sparkling and dancing on the waves, and I thought the scene was surpassingly beautiful.

I have stood on a lofty mountain peak at dawn and witnessed the sun come forth in all its majesty and power and flood the world with light and glory, and I thought it was beautiful and grand.

I have seen in the darkness of midnight the forked lightning leap from hill to hill, from crest to crest, and cut and shiver the inky clouds into rivers of fire, while the thunder rolled and reverberated in the distance, and the universe trembled in the Titanic power of the storm king, and I exclaimed —how beautiful, now grand, how sublime, is the omnipotent power of God. But, dear confrere, the most beautiful, the grandest, the sublimest creation or manifestation of God's omnipotence is a man, created in His own image, who loves his fellow-man. One who ministers to the wants and necessities of his fellow-man as softly and gently as the moonbeams fall upon the midnight sea, one who visits the sick and fills the room with a radiance as bright and glorious as the light of the

new day; one who dispels the shadows of adversity as the lightning cleaves the clouds in a somber sky; such is the true Phyisician.

When in the cottage blessed with Love's sweet store
A babe is born, and o'er the rustic door
Is hung the crown of motherhood, and fair
Is all within—the Doctor's there.

When 'neath the pall of mystic Death's weird spell
A mother's heart is broken by the knell
Of all that's dear, and on the stair
No baby feet—the Doctor's there.

When Virtue flees and breath of ruthless lust
Eats into souls as does the gnawing rust,
When no one else with Her the shame will share,
With father's touch—the Doctor's there.

Where blossoms Life's sweet Bud at blush of day,
Where breath of withered Rose at eve-tide steals away
On the South wind—in joy and care,
An uncrowned king,—the Doctor's there.

Tonight I wish I were an orator, that I might paint for you a word picture that would portray more graphically and beautifully than sculptor's chisel or artist's brush the greatness and goodness of the medical profession. Could I borrow from the sun his cheery smile, from the moon her golden beams of light, from the southern zephyrs their softness, from the rose its fragrance, from the rainbow its celestial beauty, from the babbling brook its laughter and song, from the sea its awe and wonder, from the valley its serenity, and from the mountains their majesty, and put these down upon a piece of azure blue sky, with comets for comas, and planets for periods, I might then paint for you the picture. Until then, let us be true to our trust.

After all, we cannot fail to realize that we are constantly fighting a foe that sooner or later, according to the immutable and unchangeable laws of nature, will come out victorious. From the edict "All that is born must die, all must submit

to the dominion of death," there is no appeal;—and after a little while they will say of each member of the North Carolina State Medical Society, as they did of the Great Physician,—"He saved others, himself he can not save." And when the day of capitulation shall arrive—when that inevitable hour shall have come, may a certain grim adversary recognize a noble foe and deal gently with the Doctor.

Annual Essay.

THE PROBLEMS AND TENDENCIES OF OUR PROFESSION.

By Dr. E. T. Dickinson, Annual Essayist.

The presidential statement that "if we could first know where we are, and whither we are tending, we could better judge what to do and how to do it," includes the intent of this essay.

Our constant entanglement amongst the many and various daily problems of a busy life is a veritable bewilderment. The mere mention of the petty disturbances of our professional life would make a list too long for this paper. These left alone will furnish their own best solution, the tendency of extrication from such entanglement naturally following the law and direction of least resistence.

But there are some more complicating problems, some real enduring problems, that have no self-limitations and no inherent powers of solution.

The general tendency of the day, the resultant of the wish-wash, the currents and the counter-currents state a problem that must be reckoned with, but one that can never be finally solved.

To be sure there are those in every calling who go about the work of the day before them, doing it according to the rules of their craft and asking no questions of the past or of the future or of the aim and end to which their special labor is contributing. These consider themselves busy, practical men. They pull the oars of society, and have no leisure to watch the currents running this or that way. But unconsciously the currents are carrying these men with them without their knowledge as to whether they are drifted by the good or the bad. Sir Edward Parry and his party were going straight toward the pole, in one of their arctic expeditions, travelling at the

rate of twelve miles a day, and yet no man among them would have known that he was travelling two miles a day backward, unless he had lifted his eyes from the track in which he was plodding. It is not only going backward that the plain, practical workman is liable to, and if we will not look up and look around we may go forward to ends we little dream of and could not desire.

It is a simple business for a man to build a niche in a wall; but what if a hundred years afterwards, when the wall is torn down, the skeleton of a murdered man drop out of the niche?

It was a plain, practical piece of carpentry for a Jewish artisan to fit two pieces of timber together according to the legal pattern of Pontius Pilate. He asked no questions, perhaps, but we know what burden the cross bore on the morrow, and so, with subtler tools than trowels or axes, the statesman who works in policy without principle, the theologian who works in forms without soul, the physician who, calling himself a practical man, refuses to recognize the larger laws which govern our changing practice, may all find that they have been building truth into the wall, and hanging humanity upon the cross.

But in reality, as a body, we do move forward. The solemn skepticism of science has replaced the sneering doubts of witty philosophers. The more positive knowledge we gain the more we incline to question all that has been received without absolute proof.

The most potent advances of our profession have been initiated by those whose names we see and hear in prominent places, but their perpetuation, their realization and their boon to the public have come through the efforts and the general upward tendency of the masses of the profession. Our problems belong distinctly not to individuals, and their practical solution must, in the future, as in the past, come through the sanction of the rank and file of this vast army of conscientious workers. The public good has been not in the least influ-

enced by some of the most brilliant discoveries, But the favor with which they have been met by the profession has determined their usefulness.

Although Harvey submitted his theory of the circulation of the blood to fifteen years of proofs and counter-proofs of every kind, and although one later says of him, "So much care and circumspection in research for truth, so much modesty and firmness in it demonstration, so much clearness and method in the development of his ideas should have prepossessed every one in favor of the theory of Harvey," yet, on the contrary, his true theory caused a general stupefaction in the medical world, and excited a tremendous controversy that continued more than twenty-five years, including every one possessed of any pretention to knowledge of anatomy or physiology.

The first word of advice given on vaccination by the great John Hunter, in response to a query by his equal Edward Jenner, should have engendered and energized a tendency that could have no shadow of successful combat, when he replied, "Do not think, investigate." But this was not noticed and the intrepid William Douglas said in rebuttal to Dr. Boylston's famous vaccinations in Boston, "It is too new," and thus created a cold current in the profession that has blasted many lives and has drifted down to the present day the vulgar opposition to vaccination with which we are all too familiar; an opposition still based on fanaticism and ignorance, though now rarely fierce, being largely free from the formerly dominant superstition. This was a great problem introduced in unselfishness for the common good, but rendered by the professor lengthy in solution in order to minimize for selfish purposes the value of the find.

It is a sincere pleasure to realize that the spirit of not merely thinking, but of investigating is at last recognized and is abroad in the land. No one is now credited in medicine or in surgery with what he thinks, but with what he has found.

On the other hand, as a valuable example, let us show one important advance in which there was not intermingled strong opposition. Let us review the publication of ether as an anæsthetic and note how quickly and how completely its value was endorsed by the profession and how confidently its usefulness was enjoyed by the public. The success of the operations of Dr. Warren and Dr. Hayward, while the patients were under the influence of this anæsthetic, was so complete and satisfactory as to give applause of not only the eminent operators and surgical staff of the hospital, but of the entire medical fraternity of Boston. The Massachusetts General Hospital at once became a luminous center, ushering in the dawn of the new era in the practice of surgery. Scarcely a half year passed before its rays illuminated every hospital in the capitals of this country and Europe, and anæsthesia in the practice of surgery was universally acknowledged as the greatest and most beneficent discovery in the annals of science.

While it is true that there is today a laudable tendency to philanthropic and fraternal combination into true brotherhood, yet there seems still to remain at times and especially in certain localities at least, an undercurrent, a second nature of jealousy and of combat. This is due to misunderstanding, prejudice, jealousy or other complete dislocation of one or both members into a depravity of deserved contempt. The feeling of faithful brotherhood for those working in a noble and philanthropic profession cannot allow misunderstandings to go misunderstood. Jealousy, prejudice and other strife cannot much longer disgrace the honorable name of the profession of medicine. These belong to the class we shall finally review—the quack, the fraud, the imposter, the seeker after self-gain at the expense of public comfort.

For several years our friends, the pharmacists have been displaying before us inducements to enter again into the old ways of giving much and many medicines. They have so completely cloaked even the most nauseous remedies that the

fear grows that we may return to that state of polypharmacy, the emancipation from which has been the sole gift of Hahneman and his followers to the race.

I examined one prescription of a reputed poly-prescriber and found forty-two distinct drugs combined into one dose; but I fear not a single remedy, for drugs are not remedies unless properly timed to the disease in question. And likely the greatest reason the prescriber had for incorporating the liberal number was his fear of missing a remedy. This is what is properly known to the more scientific in our profession as a pop-gun prescription which is intended to hit the disease, but which is really much more apt to hit the patient instead.

And working along with the druggist is the patent-medicine man with his advertisements influencing the public while his real partner works his magic language, called a spiel, on the profession in the interest of proprietary medicine until it is almost impossible to remember or recognize the elements of our materia medica and pharmacopœia. No wonder that from forty to sixty per cent of prescriptions, varying in different localities, contain proprietary and other unknown constituents.

We must remember as we are returning to our early teaching of the nature of individual drugs and medicinal principles. We are learning that the time consumed investigating the ever changing proprietaries would easily give us a liberal education on our principal substances used as medicines.

This proprietary medicine complication is a potent factor in causing even good thinkers to conclude that the subject of medicine is getting too broad for the comprehension of one mind, and that the division into multiple specialties is necessary. But it has been well said that he who flies to the other man in the laboratory for a solution of every problem presented in his practice soon becomes to be dependent and neglectful, to distrust his observations, and finally to undervalue all clin-

ical observations. So we shall not lean on others to the weakening of our powers of reasoning and observation.

The truth is the problems of medicine are becoming more simple every day. Formerly it was impossible to carry in mind the great number of vague statements to be recognized without reason. Now we pass naturally along from a known cause to a certain effect, and easily, because we have learned well from the dissecting hall, the physiological laboratory and the test tube the broad and accurate principles upon which these and many other physical facts rest. Really it is easy to grasp mentally the entire field of medicine and of surgery, now that only a definite number of established principles must be well known. To know properly many of the most important diseases one must be familiar with their manifestations in various organs and locations of the body. This necessity is a handicap to specialism. The patient wants in his doctor the same thing he must have in his jeweler—the ability to look through and to put the machinery in order. He cares nothing, because he is profited nothing, if all is known about the mere construction and function of the main spring or of the heart if such functions and relations of functions as are necessary for perfect repair be not known.

So the time has come when we must and when our patients will demand that we know the complete principles upon which we drug them, compelling us to know the names, composition and action of every drug that is introduced into the household. I have never had a better lesson than one given early in my career, when an evidently skeptical patient quizzed me thoroughly on the contents of every package that I had directed for him. The experience revealed to me that more of this would do us good. The only fear is that the discovery of so little learning might be a dangerous thing.

The spirit of the day, the great commercial spirit, it is feared, is taking hold upon our profession. One sets up a financial god and calls it success. With such an ideal before

him he begins by making the shortest possible cut to knowledge. He often starts in practice as a specialist and wants to be known at once as such. He is familiar with the fact that advertisement is the secret of success in modern business. *And that shrewd advertisement may bring business in medicine as well as in trade, the success of the numerous charlatans bears witness.* But he does not wish to become an advertising quack and really see his card in the morning paper. He adopts other devices. He advertises himself to his friends and acquaintances. He cultivates the acquaintance of the newspaper reporter, and soon his name finds its way often into the public press. He is interviewed in regard to the prevailing epidemic, or he is credited with performing some remarkable and terrific operation, or with some new ideas on the treatment of cancer or tuberculosis. His written contributions to medical literature are apt to take the form of citation of cases in which the newest remedy has been used, whose real purpose is to exploit the remedy and the doctor at the same time. There are other and innumerable ways in which the advertising doctor seeks to advance himself.

There are still being produced some grafters on the members of their own profession. This is the man that openly declares that he is in medicine for what he can get out of it. In every transaction he adopts the politician's anxious query, "Where do I come in?" His methods are well known to the consultant and the surgeon. He is a scalper. He visits the specialist, the surgeon or the consultant, ostensibly in behalf of his patient, and lets it be known that he expects the usual percentage of the fee, in case the patient can be persuaded, intimating at the same time that if this is made satisfactory he will need consultation in the case of other patients and has other work which he can turn over to the surgeon. Medical grafters of this type, I am glad to say, are not numerous and cannot easily multiply, for those who have enough education, sense and honor to be respected as consultants will not foster

such a scheme. These are quacks and imposters upon the public and upon the profession. See if these men take any hand in the marvelous advances of any age.

The great advance made in the practice of medicine and surgery in the last century has come because of the heroic labors of men working in pathologic and bacteriologic laboratories, delving for causes of disease and its remedies; because of men working in hospitals and at the bedside of private patients studying the clinical aspects of disease and how best they are prevented and controlled; because of men working in pharmaceutical laboratories searching for the best forms of drugs and their most useful and active ingredients.

There is a broad and just now a very inviting field for professional advancement and usefulness on the side of our profession usually known as that of general medicine. Since the advent of the new era in surgery, which has given such satisfactory and admirable results there has been something of a dearth in really the larger field of the medical science. Many not working in the new field of surgery have stood rather aghast in observation and admiration of the splendid results

There are some problems peculiarly applicable to North Carolina medicine.

of the few workers in this charming method of relief. So a friend having large clinical opportunities in general medicine lamented that he had been so unfortunately situated as to miss the opportunity in his profession. He did not, as we all do not, realize the presence of opportunity in his daily surroundings which are far superior to those of the "Father of American Surgery."

The subject of medical diagnosis is one worthy of the entire time and consideration of any practitioner in our State, yet little attention except that spent upon tuberculosis has been given this absolute essential to both successful therapeutics and successful surgery.

As a type of scientific diagnosis allow me to mention that of the ability of Dr. J. B. Worth to refer to a prognosis of

death recently given a robust man who had merely experienced two slight chills following an unsuspicious tooth extraction. But these facts connected with a history of pneumonia fifteen years previously gave a clue to evidence that led to inevitable death. Perhaps a more restful diagnosis would be one admitting a prognosis the opposite of the above. This has been seen in the description before operation of the *size* and *shape* of the stone about to be removed from the gall ducts.

Our advancement in surgery has been great but still lacks the essential aid of accurate diagnosis. How to operate is much better known than the more essential element when to operate. One of our most worthy surgeons has formulated and has often but not sufficiently repeated the statement that "Because an operation can be done is no reason it should be done." On account of the presence and work of such principles as these the reforms in our hospitals appear almost visionary. The former synonym of a place of inevitable death is transformed into a place for the regaining of perfect health.

The problem of the education of her young men, inclined to the profession, ranks first in importance and apparently last in effort of solution. Here in North Carolina it must be from the farm, the shop and the store through preliminary education that competent physicians are to be developed and matured. There are at present two apparent reasons for our impediment but only one real cause, the lack of public support to higher standards. Many years ago when physicians were few the standard was low but the people were glad to have some one, be he ever so humble, within possible reach. Later when the number as well as the irregular element so increased in the community as to become annoying and dangerous to the public health the people called upon their representatives in the legislature to give them relief. The voice of the people was heard and the higher standard almost cleared the field of incompetents, irregulars and quacks.

Just now the standards and requirements set by the public

are very crude, low, inconsistent and entirely unreasonable. Proof of this is plainly enough seen in review of the fact that the requirement for the general education of the trained nurse is a little higher than that of the aspiring physician under whose direction she must work.

There are those, and they are rather many, who think it makes no difference whether one calls himself doctor or whether he is so appelled by others. Some think that a patent medicine that speaks positively of cure is more to be trusted than the true physician who examines laboriously and long before stating his opinion. Some, indeed, still think that it is the sign of an apt fellow to be able to tell the whole story at first sight or from acquaintance of some relative or even of some closely associated friend.

So the people like other moving bodies are inclined to vacciliate, and we must recognize that they are partly helpless, the most intelligent layman often displaying a pitiful and disastrous lack of judgment in choosing medical advice. They must trust largely to appearances, and even the most incompetent practitioner usually manages to conceal his defects and to make a fine outward appearance.

So with the human hunger for being humbugged the people through our last legislature got together and spoke out in emphatic but surely embarrassing tones for a return to that annoying and dangerous condition from which they first sought legislative relief, and would not patiently listen to reasonable and very conservative plans for the further improvement of our profession. And thus we are rotated back to the point of our beginning so far as legislative support goes.

With reasonable and non-vaccilating support of our people our medical institutions would soon become endowed, our entrance requirements into the study of medicine would be perfected and our own young men would be educated at home in a scientific and practical way which would be a satisfaction and a just pride to our State.

RHEUMATISM.

By J. B. H. Knight, M.D., Williamston, N. C.

Mr. President and Members of the N. C. Medical Society:

In making my report as Chairman of the Section on Practice of Medicine, I have nothing new to offer. So far as I know, there is no new disease discovered that is of any practical importance to us, and no new remedy that has anything to especially recommend it above the old and tried ones.

It is of some of the old and tried remedies and measures of which I wish to speak, and that I may most fittingly do so I have selected the old and well worn subject of

RHEUMATISM.

This disease is as old as the hills, is found in all countries and climes, among all classes and conditions, the rich and the poor have it, all ages from the infant to the centenarian, both sexes, but males are most liable on account of being more exposed than females. And it is found in subjects between the ages of 18 and 50 more frequently than in the younger or older.

It is also found in many different varieties, and many degrees of the same variety. It may affect a single muscle, or joint, or it may involve any number of muscles, or the whole body, or one joint or any number of joints.

Rheumatism is not the simple thing that many would have us believe. It is often a very obscure disease, and is liable to be confounded with, or by a number of diseases, for example, neuralgia, sciatica, loco-motor ataxia, overstrain of muscles or some local injury as from a blow or fall, etc.

There are so many different kinds of rheumatism, arising from such various causes it makes it very difficult to properly classify it under its different heads or varieties. In doing this I shall not attempt to follow any author, but shall do so from my own experience.

I would divide it into two distinct forms—one affecting the muscular system, and the other the osseous, mainly the joints and the synovial membranes and sheaths of the tendons. There are several distinct forms in each of these varieties, any of which may be acute or chronic. First, I will speak of the forms affecting the muscular system. The most prominent of this variety is what is generally known as muscular rheumatism, which may affect a single muscle, a group of muscles, a whole limb, one side, or the whole body. This may be with or without fever. It is generally caused by exposure to cold or damp or both; is not confined to age or sex, but is generally found in the person with a rheumatic diathesis. The blood is nearly always acid, the urine scant, of high specific gravity, highly colored and characistic odor, and loaded with the urates. The patient has a foul tongue and bad breath. These symptoms are in proportion to the gravity of the case. If the fever is high, say ranging from 100 to 104 degrees I would say give your patient a good dose of calomel, rhubarb and podophylin. Follow this with the following prescription:

Quinine Salicyl. ..... dr. j
Acetanilide ..... dr. j
M. Ft. Capsules ..... No. xvj
Sig.—One every three hours until fever subsides.

Then put him on the following prescription:

Sod. Salicyl. ..... dr. viij
F. E. Phytolacca Rad. ..... fdr. iv
F. E. Nux Vomica ..... dr. j
Aqua Q. S. ad ..... oz. iv
M. Sig.—One teaspoonful in water every three hours.

This should be taken until all the pain and soreness are gone. If this patient is anæmic, a good tonic should be given for two or three weeks. Some of these cases require a good alkaline diuretic, so I often combine bi-carbonate potash in the foregoing prescription. I sometimes give this separately on account of the bad taste. Then you may use the effervescing salts of bicarb. or soda or the effervescing salts of formin comp. as put up by Warner & Co.

Frequent bathing of these cases is good treatment. Keep the bowels well open, and the skin and kidneys active. I also prefer a salt of soda made from the pure salicylic acid to one made from a synthetic salicylic acid. I am of the opinion that malaria plays a prominent part in the cause of this form of rheumatism, and find that quinine is a good remedy. I prefer the salicylate of quinine, but when this is not convenient I give the sulphate or muriate.

Rheumatic fever belongs to this type but is of more sudden onset and the fever runs higher. The treatment is largely the same, but more vigorous. In these forms, the heart is more likely to be affected, and the danger is in proportion to the height of the fever. So I always endeavor to reduce the temperature as soon as possible. I have found nothing quicker or more reliable than acetanilide. Give this in combination with quinine and caffene or nux vomica. A favorite prescription with me is the following:

Acetanilide .....grs. iij
Quinine Sul. .....grs. ij
Citrate Caffene .....grs. j
Gingerine .....grs. 1-16
M. tablets ..... j

Give one of these every two to three hours until the fever is reduced. Then follow with the prescription given above with the salicylates.

I have found formin or the formin comp. to be of excellent service in any of these cases where the kidneys were derelict in duty. In some of these severe cases where the patient lies in one position a long time, for the pain is so great they dread to move, and sometimes morphine has to be administered, which I never do until absolutely necessary, you have to look out for bed sores, which may be avoided by giving constant care and relieving pressure from the spots showing signs, and bathing these spots well with 95 per cent alcohol several times a day. Another complication we must look out for, and ward off if possible, is hypostatic pneumonia. This is liable to oc-

cur in any of the asthemic cases, or in those with a weak heart. This is best avoided by frequently changing the position of the patient and giving suitable heart tonics—strychnine, digitalis, strophenthus, belladonna, etc.

While the muscular varieties of rheumatism are more frequently found in males, in that period of life in which they are most active and consequently most exposed, it is due to the fact that they are more exposed to the climatic and weather changes.

In speaking of the varieties affecting the osseous system, I shall include those affecting the joints, synovial membranes and sheaths of tendons.

The joints mostly affected are the knees, ankles, fingers and hips. While the other joints any of them are liable to be affected these are most subject in the order named. The joints become painful, in some cases extremely so, and swollen, the skin having a glistening appearance, and in the severe cases becomes red and extremely painful, patient cannot bear to have the joint moved the least bit. Some of these cases the skin bears a pale, glistening appearance but painful all the same. When the synovial membrane is involved we are likely to find a puffy condition of the joint, with an accumulation of fluid in the joint. The constitutional treatment in these cases is largely along the manner outlined for the muscular varieties, but almost all of these require some alterative to aid in absorption of the fluids in the joint. I generally give the iodides of potash or sodium. In some of these cases affecting the joints, there is considerable of a calcareous deposit thrown out, which causes enlargement and stiffening of the joint. I will speak of the local treatment of this form along with the others in which enlargement and stiffening take place, for it is this form I especially wish to emphasize the treatment and try to bring out some new ideas. Next and similar to the joint variety is the variety affecting the sheaths of the tendons and muscles. Here we may find fever or not. When-

ever we do, it is not likely to run very high. In some cases the skin presents the normal aspect, but the pain, and great pain, is present. There may be swelling or not, and the skin may be red or not. In this variety there is a strong disposition to draw—we often find the tendons drawn up tight and feel like a rope underneath the skin. There is also a plastic deposit thrown out, which stiffens the limb, and binds down the muscles and tendons so that if they are not broken up, and kept limbered up, they soon become fastened down and the limb becomes immovable. The limbering process is indeed a painful one, so much so that the average patient has to be put under the influence of an anæsthetic before it can be done at all, but when this is necessary do not hesitate to do it. Place the patient completely under the anæsthetic and limber up the joint and flex the limb in any and every possible way, and massage the muscles good. Some cases have such a strong tendency to draw that the limb has to be put in splints and kept so until this disposition is overcome. Of course the limb is taken down every day and manipulated as well as it is possible to do so, and while doing this use some good anodyne absorptive liniment, rubbing it well. In some of these cases it is very difficult to break up the adhesions. Here I find the hot air treatment is of great benefit. While there are a considerable number of us who understand the manner and merits of this treatment, there is a considerably larger number who do not, so for their benefit I will go somewhat into the details of it. In order to give the hot air treatment we have to have a special apparatus for the purpose. It depends upon the part of the body affected what form of cabinet you want. I have been using that manufactured by Frank S. Betz Co., of Chicago, Ill., and Hammond, Ind. There are cabinets to fit any part of the body or all of it, but they all work on the same principle, and consist of a metallic chamber lined with asbestos which closes at the lamp end with a metallic lid on the same principle as an ordinary tin box. The bottom has a heat distributing

tray with asbestos top, the heat coming out through holes along its edges, the end of this tray next to the lamp having a partition attached extending upward, so that when in position it cuts off the direct heat and forms a chamber in which is suspended a thermometer to gauge the heat. On the sides are suitable hooks on which lie the rods to hold a hammock of canvas on which rests the limb. The other end is closed by a canvas which encircles the limb before placing in position, and when the limb is adjusted properly, is put around the whole end of the cabinet and clamps it with an elastic grip. Before placing the limb in position it is made bare and then wrapped in Turkish toweling, then placed in position and the cabinet closed. The heat is furnished by a lamp which may burn alcohol, oil, or gasoline, and is adjustable so that you can readily control the heat. The limb should be kept in from thirty to sixty minutes. The heat should gradually be run up to 250 or even up to 350, though 350 is pretty high. It depends largely on your patient, some stand it better than others, and also on the amount and quantity of the adhesions you have to contend with. If they are very extensive it takes a good deal to soften them so they can be broken up. The patient often gets pretty sick, and the body temperature runs up several degrees. They go into a profuse perspiration, and often call for water. When they have stayed in a good while with the heat pretty high they feel pretty faint when they come out. When the patient is taken out strip the limb at once and give it a good limbering up. It is astonishing to hear these adhesions breaking up—they pop and snap like something breaking to pieces; but don't lose any time in manipulating the limb; work it and bend it in every possible way, and massage the muscles, using some good liniment and preferably one with an alcoholic base, instead of an oily one. These cases having extensive plastic adhesions are not easily cured. You have to give a vigorous treatment and keep it

up. Keep your patient on some good alkaline diuretic, use the hot air treatment daily, or at least every other day, and massage and manipulate the limb well at each treatment, and also give the limb a good massage treatment two or three times a day.

I have seen some of these cases that did not have the proper treatment go on until the whole limb became completely stiffened—I like to have said ossified. I have seen one case that the whole body was affected, but the neck and head—the patient not being able to bend the body, or move an arm or leg, could talk as glibly as ever, but had to be fed a mouthful at a time just like a baby. This patient suffered for twenty years—was bed-ridden for eighteen years, and as helpless as a baby for twelve years.

I know another cases, now living, that has a calcareous deposit in the muscles of the hands, fingers, wrists and forearms, gradually extending upward. The flesh is a dark, dusky, glistening red, and almost as hard as bone.

These are the cases, and it should be begun and kept up until all progress of the disease has vanished and the soreness gone. In this form of rheumatism we have something to fight.

Lastly, I will speak of the septic form which usually follows some germ disease and is likely to be confounded with it; and in this connection will discuss the gouty form with which it is most likely to be confounded, notably gonorrhœal. The gonorrhœal form is frequently seen. These cases always give a history of gonorrhœa, some have only had it a time or two, others may have had it a good many times. These cases have fever and enlargements of the joints, and most of them, if an aggravated case, considerably enlarged and very tender and painful. This may be distinguished from the gouty form both from the history of the case and in the fact that while the joint is very much swollen and tender it lacks the calcareous deposit found in the other. I might say in passing, that

while any joint may be affected, the ankles are most liable and next the knees. The gouty form seems to appear in the smaller points preferably, the fingers and toes being most subject, while the gonorrhœal form almost always attacks the larger joints. The difference in the treatment of these two forms hinges mainly on the administration of two drugs—iodides to the gonorrhœal and calcum to the gouty cases. Simply add these to the first prescription, containing the salicylates and phytolacca rad. These cases need a good deal of rubbing, and the use of a good anodyne liniment. If there should arise any plastic adhesions I would not hesitate to use the hot air treatment. In all forms of rheumatism quiet and rest in bed during the full term of the acute stage is necessary, and it is just so long as there is pain. The diet should be very light and easily digestible and of a bland nature. Allow no acids or greasy foods.

In some of these cases of acute articular rheumatism it is well to apply ichthyol ointment, or antiphlogistine, or cataplasm of kaolin, and envelop the joint in cotton batting and bandage carefully between treatments, as they help to relieve the pain and reduce the swelling. I also, sometimes when the joints are very much swollen and the fever high, envelop them in towels wrung out of ice water and keep changing as often as they get warm. The best drug I have found for reducing the temperature and at the same time relieving the pain is acetanlid. I give this to adults in from two to five grain doses every two to three hours, but nearly always combine it with quinine. When this drug is used morphine is rarely ever required.

DIABETES MELLITUS.

By J. A. Reagan, A.M., M.D.

I have chosen this subject because no member, so far as I know, has written upon it; and also that we may discuss it, if perchance some valuable suggestions may be made that will give us some clearer light on its etiology and treatment.

As to the cause of diabetes mellitus there have been, and still are, different opinions entertained by the most eminent of our noble profession. Its cause has by some been attributed to the liver, while others, equally eminent, contend that this theory is not correct, as the liver has been examined after death and found healthy, and not containing an abnormal quantity of glucose. Others have attributed it to the pancreas, and said the functions were over-active, which caused too great a flow of pancreatic juice that changed the starchy matter into glucose. Latham and others take a different view, and think that neither the liver or pancreas is the cause, but that the muscles are the cause, or source of the sugar in the blood. Again, it is said that the nerves is the origin of the disease. This is held, and advocated by many of the first men of the profession. But whatever may be the cause, we must bear in mind the fact that the glucose in the blood acts as an irritant poison that invades every tissue of the body, which predisposes inflammation, especially of lungs and kidneys. We may not agree as to the cause of the disease or the organs at fault, yet we all know there are exciting causes, which some attribute to an excessive use of sweets, starchy food, beer, cider or champagne. Some medicines are accused of exciting the increase of sugar in the system, such as opium, chloroform, and the bromides of potassium. Some persons, from their idiosyncracies are more liable to the disease than others. It is not the over-worked physical laborer of the hard-working class, who is more liable to an attack than other laborers, but

the mental strain and anxiety of the professional class; hence some have concluded that the physician is more liable to an attack of diabetes mellitus than any other class.

The amount of water passed in twenty-four hours is sometimes enormous. Dr. Thomas Watson, in his lectures on the practice of medicine, says: "Cases are recorded by writers of credit and veracity in which seventy pints were passed daily; nay, one Italian author declares that two hundred pints have been discharged in that time." It is not the amount of water alone that constitutes the disease, but the honey, as the literal translation of the Greek word means, which is in the water and system. The amount of sugar is also very large in some cases, running up to one-sixth or even one-eighth per cent. The great effort of the profession seems to have been to lessen the amount of sugar instead of removing the cause, and in order to accomplish this they have recommended strictly the use of proteid diet. The error of this practice has been shown by several investigators. Dr. E. L. Munson says the sugar decreased for six or seven days, and then increased regularly nearly up to where it was when he began the proteid, or meat diet. All the time the proteid diet was exclusively used the patient lost flesh, and became quite weak. He found also that this diet produced dyspepsia, and neuralgia, and vertigo —his mind wandered considerably. He finally became depressed and delirious, and lost his appetite. He then placed him on a mixed diet, and says, "One month after employing a mixed diet the patient finds himself subjectively better every way. He has gained in weight and muscular power, and the previously marked cerebral symptoms have almost entirely disappeared. Headaches and vertigo, which were formerly almost constant under the proteid, have nearly disappeared." After thoroughly investigating the effect of the dieting system, Dr. Munson says: "In regard to diet, as has been shown a strictly proteid diet, instead of removing, may even increase the dyscrasia in a true diabetes, nor in advanced cases will it be

efficacious in its only object, the disappearance of sugar from the urine. As the effects of a rigid proteid diet have been detailed, it will only be necessary in this connection to state a purely proteid diet should, under no circumstances, be employed.

Food of all varieties, provided they are nutritious and wholesome, should be allowed, although, of course, no excess in eating should be permitted. Moderate amounts of carbohydrates, in the form of bread, oat meal or rice, should by all means be encouraged." He also recommends exercise, and cheerful society. Dr. H. Forestier, physician at Aix-les-Bains, says the "point I wish more particularly to impress is the diet used, and the reduction following while using the mixed diet." Prof. Finkler used kneeding in fourteen cases, and says: "The diet at the same time was mixed. The result, on the whole, was favorable, the sugar decreasing, and the bodily weight increasing." Some physicians travel on the old track, and fear to introduce any treatment that would be criticised by others. So far as I am concerned, I have believed for years that diabetes mellitus carried patients off fast enough without starving them, to make them die sooner, consequently, what few patients I have had with this disease I gave them a mixed diet, and found they improved faster than they have done under others who used the proteid diet. It is known to the medical profession that no one diet will sustain the whole system—milk comes nearer than any one diet. Those physicians who believe so strongly in the starvation treatment, must feel that Dr. Munson's experience ought to have kept the sugar decreasing, instead of increasing, as it did; and that it should have increased instead of decreased under a mixed diet. Even in health a man is not able to keep up the equilibrium of his metabolism on purely a meat diet. He could not live many years by so doing; it is much worse in sickness when a wasting disease is helping to carry him off. In brief, the proportion of nitrogenous to the non-nitrogenous food is as one to seven-tenths—consequently meat

would have to be increased to such an amount that he could not digest it; consequently all the evils arising from indigestion would follow. Remove all carbohydrates from the food, the appetite may increase, but the muscles will decrease. Man can not live by meat alone, he must have some carbohydrates mixed with it. Professor Oppolzer says, "The diet can exert no direct influence upon the disease itself; it is only able to prolong life." While many physicians cling to the meat diet, and push it until the patient dies, the question naturally arises, Is it best to starve parts of the system in order to give another part rest, without a hope of curing the patient? Mr. Gregory obtained, by means of an emetic the digested food from the stomachs of two men who had dined two or three hours before. One man was healthy, the other had diabetes. In each the food had been of the ordinary food of the hotel. Applying the ordinary test, yeast, he found the vomited matter of each fermented. Dr. Thomas Watson, in his lecture on Diabetes Melitus, after describing the symptoms, experiments, the tests and treatment, says, "I dare not affirm that diabetes, although it seems merely a functional disorder, has ever been cured." Yet many other writers have reported a number of cured cases. Tuberculosis was once regarded as incurable, and now the best writers put the recoveries at thirty-three per cent. I saw, in the dissection room of a college of repute, a lady who had had consumption some twenty years before her death, which was caused by a severe case of typhoid fever. One of the professors had treated her, and permission was given to examine her lungs. Her lungs were sound, and showed the cicatrices where they had healed. So we hope the profession may be able, at no distant day, to find a remedy for diabetes mellitus that will regulate the system and bring about a natural action of the different organs involved, especially, in my opinion, the nervous system should be closely watched, as it plays an important part in the production of the disease. While a proper diet is commendable, yet the proper diet, in

my opinion, is a mixed diet—not proteid alone. It is remarkable the number of medicines that have been tried and recommended in this disease, and many of them of entirely different therapeutic action. Opium, arsenic, and several acids, have been recommended by different writers. Dr. John Day recommends peroxide of hydrogen, on the principle that the sugar has a heating power—a tendency to burn up vitals by degrees, creating great thirst. Guyget-Dounay recommends citrate of soda, and professes to have cured several cases by that treatment. Professor Bouchardat says "dieting patients is only palliative, but recommends exercise—even forced exercise—in any way in open air. He says he has had good success with this treatment. Von-Holst recommends glycerine, and claims success in its use. Dr. McCharteris reports success in the treatment of diabetes mellitus by the use of pilocorpin. Dr. George W. Balfour says he has succeeded in curing several cases by the internal use of lactic acid. Dr. Richter recommends emetics, and says several cases have been cured by that means. He gives a case of diabetis mellitus where an emetic brought up a very great quantity of bilious matter, and says: "I can assert with truth that the next morning there was not a vestige of diabetes, or any other complaint, present."

When we read the opinions and recommendations of the most prominent physicians of years that have long gone by, and then study the opinions and treatment of the present, we are still at sea, and the age and learning of the present demand that we should more thoroughly and scientifically investigate its etiology—the effect on the different parts of the system, and be able scientifically to treat the disease and not be drifting longer on the vast ocean of doubt and uncertainty. Dr. Munson certainly deserves praise for his labors in that direction. Let others take it up where he has left it, and work out the cause, effect, and proper treatment.

I have had but few cases myself. My treatment has been

to regulate the system and try to keep it in order—watching carefully the bowels, stomach, liver, nervous system, and the kidneys. I allow a mixed diet, milk mostly, with bread and meats, and use belladonna and nux vomica internally. I prefer this to opium or any other medicine to stop the flow of urine. But from long experience and tolerably close reading, that the greater the different kinds of medicines recommended and used in any disease, the less reliance is to be placed in any one of them. It shows a want of confidence in the treatment of any disease, when the profession recommends so many kinds of medicine in the treatment of the disease.

TREATMENT OF THE INTESTINAL SUMMER DISEASES IN CHILDREN.

By Dr. R. J. Noble, Selma, N. C.

Mr. President and Gentlemen of the Society:

My paper is on the treatment of the summer intestinal diseases of children, or rather infants, which includes all the summer diarrhœas—ilea-colitis, cholera infantum, etc.

Twelve years ago I lost a child twenty-one months old from ilio-colitis. I had the best medical men with him that could be had. Every attention was given him, but to no avail; he would have lived just as long had he not had a drop of medicine, and I shall never forget his last feeble words, "Bye-bye." To think that I had to sit there and see that sweet life go out and I perfectly helpless to relieve him or prolong it one hour was more than I could bear. I at once began to look for other treatment, as all I had or could get was worse than useless. I tried various lines of treatment, but with no better success, though of course some have gotten well. One day I had a case, an infant about twelve months old, with the following symptoms: Vomiting, skin cold and shrivelled, bowels acting every ten to thirty minutes, streaked with blood, and with severe tenesmus, great thirst, fever per rectum 103½, countenance expressive of great pain and fear. What must I do for him? All that I had done for others in the same condition had done no good. What did I want to do? The skin must me warmed, the vomiting and fever must be controlled. Atropia would cause the capillaries to dilate, so I gave him 1-1200 of a grain every two hours. Aconite would reduce the fever so I gave him one drop every two hours. I gave him 1-10 of a grain of calomel every hour till ten doses were given, nothing else, no food, not allowed to nurse for 24 hours, tablespoonful of water often. I left for home some four miles and had not been there half an hour when a mes-

senger came saying, the baby is worse and they want you to come back. When I arrived I was told that shortly after giving atropia the baby had turned red and had a burning fever, for about an hour, but was now better. The patient was asleep but had only a slight flush. Said there was not so much tenesmus with the last action and less blood. Ordered treatment continued and told them they might expect a red skin with each dose of the red medicine. I usually color the atropia. The next day seemed better and the treatment was continued to recovery. That was in the summer of 1903, and since then I have not lost a case. I know it to be said that your cases were not serious. I guess my cases are about like those all country doctors have, and I have the satisfaction of knowing that I have not lost a case since then and I believe that if I had treated my little fellow that way he would now be living so far as that illness was concerned. My treatment now is to give 1-1200 of a grain of sulphate of atropia every two to three hours, never giving the second dose as long as the skin is red, for that is all that I want. I have tablets of 1-100 of a grain of sulphate of atropia. I put one into a glass and put 12 teaspoonfuls of water to it with a small piece of red coloring, then into another glass containing 12 teaspoonsful of water, I put 12 to 48 drops of tincture of aconite, one teaspoonful of which is given every two hours. I have this given regardless of fever, that is, what the parents think of the fever, for the skin is always cool except when red from the atropia. I do not try to check the bowels, as I believe nature is trying to get rid of the poison. The mothers often ask, Doctor, can't you give something to check the bowels? I answer: No, they will check in good time. As the atropia checks the secretions there will not be so many movements. I never allow ice water, though I let them have a small quantity of water as often as they wish. For the nursling I stop the breast for twenty-four hours and allow albumen water. After the fever is controlled I usually give the following:

Zinc-sulpho carb. .....gr. 1-20
Salol .....gr. 1-3
Cal. 1-10
Lactated pepsin .....1½ gr.
Every two or three hours for some days.

I find that after each drink of ice water the bowels will act in from three to ten minutes, and I believe that a great deal of harm is done by the ice water. I do not insist on nourishment, the patient will take it when the fever goes off. Keep the fever down, let the bowels alone, do not give opium, keep the skin warm and your patient will get well.

INCIDENTS IN THE LIFE OF A COUNTRY DOCTOR.

By Will B. Crawford, M.D.

A little over twelve years ago, impaired health caused me to give up practice in a thriving town in Western North Carolina, and with every indication pointing then to the fact that my professional usefulness was drawing to a close, naturally, my inclination was to return to my old plantation home, among the pines of Eastern North Carolina, and spend the remainder of my days amid the familiar scenes of my childhood, and among the friends of my boyhood days. But I was twice disappointed, and both of which was decidedly agreeable.

What I feared, and had every evidence to believe, was an approaching dissolution, gave way to a return of health, in less than a year, and ere long I found myself really enjoying the busiest practice I ever had, and gaining experience in self-confidence and self-reliance, which circumstances thrust upon me, that would have been of decided benefit to me, in my early professional career. It is a few of these experiences that I will now tax your patience to narrate, many similar cases, coming in the lives of other members of the profession, no doubt.

I had not made many calls in the community, before I was engaged to attend a case of labor, a large, fleshy woman, twenty years of age, primipara, and knowing that the management of this case would decide my ability as an accoucheur in the neighborhood, I was doubly interested—first, in the welfare of the patient, and then, in the result of my efforts, in giving her the best attention possible, in order to win the confidence of the family and friends.

When called I found, upon examination, a normal presentation, and the patient in good condition, everything indicating a natural labor. At the ending of the first stage of

labor, I was confident it would terminte early, and about the time I was congratulating myself that it would soon be over, I was somewhat alarmed to find my patient with rapidly bounding pulse, dilated pupils, and almost complete uterine inertia, and every indication of impending convulsions, which I momentarily expected.

The only thing for me to do, was to maintain my composure, and act promptly, deliver with instruments. I had never administered chloroform and used forceps alone, from the fact that help was heretofore in reach. But here, it was ten miles away, and delay might have meant disaster. I gave hypodermic of morphia and atropie, and with the use of a very little chloroform, applied forceps and delivered her without harm to either mother or child, in a very short time, I not only gained the utmost confidence of the entire community, but added considerably to my fund of self-reliance, and materially strengthened my self-confidence. When thrown upon our own resources, and success crowns our efforts, the feeling of pride which is experienced is more or less tinged with regret that similar circumstances had not been brought to bear in our lives earlier, to teach us that degree of confidence required in any exigency. Since then, I have used them many times, entirely alone, and after, with practically no help, without one case of failure, or loss of mother or child, but do not advocate the use of them indiscriminately..

Some time after this I was called in consultation to assist in the delivery of a patient, who from childhood had had a short limb the result of hip joint disease. She had been in labor twenty-four hours, with very little progress. Examination revealed the fact that the pelvis was very much contracted on the lame side, giving a one-sided condition to the outlet.

I resorted to instrumental means in this case with a very marked degree of apprehension, but the long continued labor, with no progress, had almost exhausted her and there was no

time to defer action. It was with great difficulty that I applied the instruments, owing to her excited condition, refusal to allow chloroform administered, and abnormal parts. But I succeeded, and delivered her in very few minutes after getting forceps in place, and she made an uneventful recovery, notwithstanding the fact that she was told by her mother and friends that I was going to finish killing her, and left the room when I began getting my instruments ready to use.

On one of my busy rounds along a lonely way, as I was thinking of the probable result of a very sick case of typhoid fever, I was hailed by a party some distance from the road, and when I drew rein, he came running across the field, sometimes clearing two rows of cotton at a time, and looked as if he might be jumping ten feet. Of course I thought some one desperately ill and a dissolution imminent. He ran up to my buggy, and with one hand on either wheel, remarked between breaths: "You isn't got any assafizzity is you, Doctor?" I simply replied: "I is not," and drove off. He looked after me as though he thought any one pretending to practice medicine, and did not have assafizzity, was no doctor at all, and it is possible his thoughts were well grounded.

One of the most trying cases with which I ever had to deal, was one of puerperal fever, which continued for two months. The lady, a very intelligent woman, wife of a prosperous farmer, was attended by a colored "granny," and I was called to see her the tenth day after confinement, and the sixth day after the initial chill, finding her with a temperature of 100 5-15, pulse 160, and all the symptons attendant upon the trouble in its severest form, the abdomen so distended and painful, as not to allow the weight of the bed cover. It was not until after convalescence set in that I found out the cause of the trouble. The fourth day after her confinement, in the afternoon, the old darkey was doing the family washing, and with her hands just out of the wash tub, she removed some clots from the vagina, and patient had a severe chill before sundown, and continued fever, and all the complications

which go to make up child-bed fever, her life being despaired of more than once during the attack.

At one o'clock one night last fall I was hastily aroused, and upon investigation found in my yard two of the neighborhood negroes, with another younger one lying in the bottom of a spring wagon, and by the light of my lantern it looked as if he was at least three inches deep in blood. He was pulseless, and cold, and after stimulating him, examination showed a cut from another negro's razor, which extended from the backbone around to the left nipple; and thinking he would die before reaching his home, three miles away, I dressed the wound as he lay. It lay open to such an extent that there was bulging between the ribs at every inspiration. I put in thirteen stitches, (even though an unlucky number), dusting over it equal parts of boracic acid and acetanilide, with plain gauze and absorbing cotton, and applied bandage; all this was done by the light of a lantern and the moon. Next morning I called to see him, and found him in good condition, with no fever, and wanting to get up, and in less than one week the negro was attending church again.

A hurry call recently took me to the bedised of a young woman, who had been attended eight hours previous by an ignorant midwife, and when I entered the room, I was informed by the old "granny" that she could not "clear'er" that it had "growed to'er." The cord was tied around the patient's thigh, either to keep it from getting away, or the woman one, I did not ascertain which, and was torn loose from the placenta, which was retained, and the patient bathed in blood and pulseless. The mouth of the womb was firm, and rigid, but I succeeded in dilating, after a while, and removed it, though not without some trouble. The patient made a good recovery though weak from loss of blood, and I can not understand why she did not die before I arrived. The thing that surprises me most in all my professional life, is that more of this class of cases treated by such "grannies" do not

die, and in view of the fact that they do not, a dissertation on meddlesome midwifery would be entirely out of order.

A case of puerperal eclampia, in which I was called in consultation, showed me that there is such a thing as shaking life "into" one, as well as shaking it "out" of one. I had used forceps, and the child showed no evidence of life, the mother having had six convulsions before I arrived. The delivery was not difficult, and after trying for some time to resuscitate the child, I handed it to a neighbor woman, remarking that I did not think it worth while to try longer, as the other Doctor had also tried. The woman laid it across her lap, face downward, and began jolting it on her knee, turning it over occasionally. In an hour's time that child cried as lustily as I ever heard one, which must have been at least two hours after it was born. She literally shook life into it.

Of all the remedies that different people have for the ills flesh is heir to, the country doctor runs up against as many as any man living. From tying knots in a string for every wart on a child, and then tying the string to a frog's leg, so he can hop off with them, even up to "Nanny tea," there are as many and varied remedies to be found in every neighborhood as there are testimonials in a patent medicine almanac. And each one's remedy is, as they call it, a "present cure." One, I well remember seeing written on a piece of blank, or at least brown paper, for chills, consisted of the following ingredients:

Epsom salts ..... 1 pound.
Sulph. quinine ..... 1 ounce.
Corn whiskey ..... 1 quart.
Dose, a wineglassful three times a day.

While nothing so very much wrong with the ingredients, I would prefer chills to the dose.

I saw a patient not long since, a boy six years old, who had been having chills regularly, for some weeks. His mother, a very pious woman, with ordinary intelligence told me she had done everything to break them and could not, and that she had "walked" him for them but that had failed, and

she never knew it to before, and she had sent for me to "look at" him, and see if I knew what to do. If there was any new way to cure them I wanted to know it, so I asked her to explain the "walking" cure, or "walking" them off. She good-naturedly replied, "Why, didn't you ever try that? Just walk him out in the woods keeping behind him all the time, till you come to a sour-wood tree, then break off a limb, and turn right around and go back to the house and put that bush over the door he goes in, and make him walk back and forth under it for every chill he has had, but it didn't do a bit of good this time."

My first impulse was to censure her, but when I remembered that most of us have more or less superstition, and that no doubt her bump was a little higher developed than mine, I refrained from doing so. The boy never had any more chills, and perhaps the walking can come in for its share of credit, in helping the calomel and quinine I gave him get in good work.

The life of the country doctor is one of varied and trying experiences. His patrons expect more of him than they do the city doctors, and will pay the latter a hundred dollar fee, as quick as they will the country doctor one of ten dollars. They have less regard for his professional ability, and censure him for the most simple causes. I had one good man to go six miles for medical services, (who lives right near me), and some time afterwards found out it was because I refused to loan him my wagon to hitch a log-cart to and haul logs to a steam mill. He did not offer to hire it, he wanted to borrow. Another got disgruntled because I would not loan him a new mowing machine to cut five acres of grass. A country doctor like the Apostle, must be, all things to all men, and then, some few will find fault if he does not attend his professional duties with an equal degree of energy, and more self-sacrifice, than is required of his city brother, whose

office hours are not from sun to sun, day and night, as is required in the country, and while the country doctor may not be as fine a diagnostician as his brother in the city, he has a decided advantage in his familiarity with drugs due to his own dispensing, and in having so little, as compared with the attractions of the city to divert his mind in devoting his leisure to medical literature. He is nearer his patients, lives right amongst them, knows the people of the neighborhood, as all the sciences can never know, and taking everything into consideration, there is no class of men doing more, or nobler work, with such little renumeration, when compared to services rendered, as those who are honestly using their best efforts in battling against disease, suffering and death, in the rural districts all over our land.

THE DOCTOR AS AN EDUCATOR OF THE PUBLIC.

By Dr. B. K. Hays, Oxford, N. C.

From a scientific article* in a recent magazine I have copied the following:

"There is no stranger paradox of science than this: That knowledge tends to begin with things far off, to end with the understanding of things familiar. The study of the stars of heaven is the oldest of the sciences; the study of the human mind is the youngest.

"There are no undiscovered mountains on the face of the moon as high as scores of charted peaks in Alaska and Asia.

"The planet Mars has been mapped clear to the poles. Helium was discovered in the sun years before it was found on the earth; caronium is still known only there.

"We have been sucking in with every breath argon, neon, krypton, and xenon, the new-found gases, with whose conquest chemistry enters a new realm.

"Radio activity turns out to be practically universal, while the successive transformations of the wizard metal end in lead.

"Gravitation is the single natural force that remains unexplained.

"What wonder, then, that life—the life that animates the grass of the field, the life that, without interruption, has been handed on from parent to offspring since the beginning of geologic history, the commencement of all things in nature—is the one thing which science understands least, the final problem which science is only now beginning to approach."

In like manner, Mr. President, we of the Medical Profession have devoted ourselves to the study of rare diseases and abstruse problems. We have mastered systems of therapy that would have caused our forefathers to stand aghast. We

*By E. W. Brewster in "The World's Work" for April, 1907.

are familiar with the rarest serum concocted in German laboratories. We laugh to scorn the professional brother who can not discuss the latest treatment of some far off tropical disease.

With no thought of personal gain we give to the public the benefit of our reasoning and of our research.

The intelligent layman reads in current literature of our most scientific advancement. These articles are not the product of ignorance nor of guess work, but are from the pens of the foremost specialists of our age.

A Pasteur discovers a treatment for hydrophobia and civic pride demands a Pasteur Institute.

A Behrin discovers a treatment for diphtheria and within a year public opinion demands that we use it whether we believe in it or not.

A Koch announces a tubercular antitoxin and immediately the physician is denominated a "back number" who is not prepared to administer it.

A trypsin treatment for cancer, an "opsonic" treatment for the blood or a thyroid extract treatment for the glands is evolved, and we, by carefully prepared papers, by public addresses, by our conversation in the social circle or at the bed side render an eager public as familiar with these things as we ourselves.

In matters pertaining to the treatment of diseases we are self-appointed educators, and every physician,

> "Like Cato gives his little senate laws
> And sits attentive to his own applause."

Nor has the surgeon been less diligent in this regard than the physician. Every man who has a belly ache has been taught that he must either have his appendix removed or his hepatic duct explored for gall stones. Indigestion is the result of gastic ulcer or of carcinoma. In either event an abdominal operation must be done.

I am not here to oppose surgery. I have no criticism to

make of medical research. I have elsewhere undertaken to prove that modern civilization could not exist were it not for the accomplishments of medical science.

I am proud of my profession. I am proud that I can say of the men who expelled smallpox, yellow fever, hospital gangrene, and other messengers of death, that they were my brethren. But, sirs, as educators of the public "we have strained at a gnat and swallowed a camel."

We have gratified the desire on the part of our friends to hear some new thing. We have instructed the public in matters seemingly occult and mysterious. But in those things which affect men in their daily lives; in the thing of greatest importance to health; in the essential knowledge of simplest hygiene there is profound ignorance.

There are four simple words whose meaning, and importance, if grasped by the public, would reduce to one-half, the present death rate in North Carolina. They are *ventilation, exercise, diet, cheerfulness.*

Let me enlarge upon these a little. Last year, in consultation with a physician who is doing a large and successful practice, I went into the room of a patient with pneumonia. The room was hot, close and foul-smelling. When I advised that a window be opened my consultant objected on the ground that night air was unhealthy. He stated that he himself had been made sick by breathing night air, and refused to let the patient's window be opened. When ideas like this are still held by the profession what can we hope from the laity?

Our churches, theaters, court-houses and school rooms are poorly ventilated—frequently not ventilated at all—and no man raises his voice in protest.

Half the physicians who compose this society have, during the past winter, worshiped God in an unsanitary church building; permitted their children to sit in unsanitary school rooms and paid their hard-earned dollars for the privilege of sitting three hours together in an unsanitary opera house.

With the advent of summer comes the diseases of children. We find our little patients with a temperature of one hundred and five. The windows and doors of the sick room are closed. The child is wrapped in flannel. It is held in the fat lap of a loving grandmother, and its life is slowly burned away.

The indifference everywhere noticeable to ventilation may also be observed in regard to exercise and and to diet. The over-worked and under-fed patient presents himself with tuberculosis; the underworked and over-fed comes with some of the various manifestations of uric acid. The object of this paper is not to suggest the amount or kind of exercise for patients. The point which I wish to drive home is this: that the ignorance, indifference and stupidity on the part of the laity in regard to these things is a condition for which the medical profession is largely responsible.

If we are in realty the custodians of health; if we have the uplift of humanity and the welfare of our patients at heart; if we are to remain the educators in matters of hygiene then we must instruct people how to lead sanitary lives.

Finally, it seems to me that the grossest ignorance and most criminal stupidity prevails in regard to the law of suggestion.

Suppose you are invited to dine with a friend. Before dinner he informs you that the meal is not such as to agree with your stomach. At table he plies questions like these: Do you think you can take it? Is it making you sick? Are you nausated? Do you want the slop bucket? Are you going to puke?

Would any man enjoy such a meal? And yet just such questions are constantly being asked in the sick room.

Recently I said to a loving husband that no one must go into the sick room of his wife while weeping. With profound gravity he replied that tears showed sympathy and interest and that these were very grateful to a sick person.

When I have asked friends not to make unpleasant suggestions in the sick room, but on the contrary to suggest health and life and hope and joy, the charge is sure to come, "You are a Christian scientist."

Sirs, if we have so nearly lost our birth-right that we can no longer invoke cheerfulness in the sick room save in the name of Mother Eddy, it were better that a mill-stone were hanged about our necks and we were drowned in the depths of the sea.

Are we to sit supinely in our homes while tuberculosis is decimating towns and villages? Is typhoid fever rampant to raise no voice of protest from the profession? Are American stomachs and nervous systems going to rack and ruin while we sit by with a smile? Or are we to listen to the gospel of a "simple life" preached by a layman, to the message of hope from the Christian Scientist, to sanitary science from the civil engineer?

Gentlemen of the Medical Profession, your people love you. Your towns and counties value your services. Your patrons look to you in sickness as a child cries to its parents in the night. To you is given the power to stamp out many of the diseases which prevail in our State—chief among which is tuberculosis. And this power can best be exercised by a systematic, intelligent education of public opinion.

WHY IS THE MIDDLE EAR AN ACCESSORY OF THE UPPER RESPIRATORY TRACT, WHICH OFTEN BECOMES THE ETIOLOGICAL HEADQUARTERS OF OTITIS MEDIA AND ACQUIRED DEAFNESS?

By W. P. Reaves, M.D., Greensboro, N. C.

If the middle ear is an accessory cavity of the upper respiratory tract, its physiological function ought to be co-dependent upon normal physiological breathing, plus the proper ventilation of the middle ear through the eustachian tube.

Now, gentlemen, that we may reason from cause to effect, it will be necessary to briefly touch upon the anatomy of the tympanic cavity and its adnexa, and to understand the normal physical condition, upon which, its physiological action depend. It would be impossible to appreciate a pathological injury not knowing the physiological function. It is optimism to expect normal physiological action when a physical law upon which it depends is violated.

The middle ear is hidden away in the base of the skull in the petrous portion of the temporal bone; midway between the auricle and the naso-pharynx communicating with the naso-pharynx through the eustachian tube, which is about 4 cm. in length and 1 mm. in diameter, lined with a continuation of the mucous membrane of the naso-pharynx and extending into the tmypanic cavity.

The middle ear consists of two parts, the lower and narrower, bounded externally by the tympanic membrane, and internally is the opening of the eustachian tube. It will hold about 2 mm., and contains air. The handle of the malleus projects from the attic and is attached to the drum.

The upper and wider part called the attic, is somewhat dome-shaped and contains three of the smallest bones in the body, the malleus incus, and stapes, for transmitting vibrations of sound waves from the drum to the internal ear; and

two of the smallest muscles, the tensor tympani and stapedius, acting as governors to control the vibrations of the tympanic membrane and ossicles, (the protection of these two functions was the incentive for writing this paper.) It is bounded above by the tegmen tympani, a transparent plate of bone separating the attic from the middle fossa of the skull, which becomes a dangerous and frequently a fatal point in purulent otitis. The aditus and antrum, leading from the posterior and external angle of the attic to the mastoid antrum, increasing its pneumatic capacity in the normal ear, and apparently serving as a drip cup in purulent otitis.

Therefore, the tympanic cavity is a protective chamber for the ossicles and muscles of the middle ear, and a ventilated air chamber establishing an equilibrium of air pressure on both sides of the drum; giving a drum with absolute freedom, and is as sensitive to sound waves as if suspended in the air. It is lined with muco-periosteum, which is reflected over the ossicles, permitting their free, easy, and quick motion. If the ossicles were covered with skin, the flexibility of the joints would be greatly reduced, and in the same proportion reduce the acuteness of the hearing. Thus the middle ear must be ventilated not simply with air, but moist warm air to protect its delicate lining. If our logic is sound that the tympanic cavity is a protective chamber for its ossicles and muscles—a ventilated air chamber—and has a delicate lining that raw air would dry and harden; injuring or destroying the physiological function of the middle ear; then the answer to the "why" of this paper is, that the ventilation of the tympanic cavity with moist, warm air essential to protect its physiological function. Nature's only available supply is by tapping the upper respiratory tract by an eustachian tube, thereby making it an accessory cavity through which intervention ventilation with moist warm air, is maintained.

Upon these anatomical, physical, and physiological facts

let us study the second half of the subjects, which are the descendants of local or pathological causes in the upper respiratory tract; that prevents the normal physico-physiological relations of the tympanic cavity and its sound conducting apparatus, by obstructing the eustachian tube or by making it a common pathological carrier. In this way it becomes the connecting link in possibly 90 per cent of otitis media and acquired deafness:

1. By failing to perform its function of ventilation.
2. By invasion of pathogenic bacteria from the naso-pharynx through the tube into the middle ear.
3. By extension by continuity of inflamation from the naso-pharynx through the tube into the middle ear.

If it be true that otitis media and acquired deafness are sequelæ of local or pathological conditions in the rhino-pharynx, then they are the third generation of the etiology producing these conditions, whose predisposing, acquired and exciting causes are practically beyond the physician's control; but the local and pathological causes in the upper respiratory tract are accessible and amenable to treatment, and he who fails to appreciate their clinical importance will not receive the gratifying reward of an ever-grateful patient.

Predisposing Cause: Should the child be so unfortunate that a part of his hereditary or constitutional assets be labelled "Status Lymphaticus," a term that the Germans have used to designate an exaggerated susceptibilty of pymphoid tissue, in which inflammation sets up hyperplasia in the lymph nodes, out of proportion to the exciting cause. The hyperplasia continuing when the exciting cause has subsided, especially adenoids in the naso-parynx and tonsils in the throat, which are sometimes hypertrophied at birth.

"Status Lymphaticus" is not always hereditary, but may be acquired for want of proper hygienic surroundings, dietetics, and proper clothing; which are essential for the normal development of the child. It is seen to perfection in cities, crowded tenement houses and institutional reared children.

The most prominent exciting causes acting upon these hypersensitive lymphatics in the upper respiratory tract, are colds, whooping cough and measles, and the exanthematous fevers, which every mother feels that her child must have because they are children's diseases.

In most instances, if not removed, the adenoids and tonsils begin to atrophy at about the age of puberty, and may cease to be a source of trouble; but often leave an intumescent or hypertrophic rhinitis, or a chronic naso-pharyngitis as their pathological successors. Other local causes, more frequent in adults, are spurs, ridges and deviation of the septum. One or more of these local factors will produce partial or complete obstructions of nasal breathing, plus their mechanical irritation produces congestion of the rhino-pharynx with pathological changes of its mucous membrane, lessening its resistance to pathological bacteria and produces pathological secretions, which block its physiological function, giving a condition, especially in the exaggerated case of children, that is best described as a physiological constipation with a pathological diarrhœa of the rhino-pharynx, from whence nature expects the middle ear to be ventilated with moist warm air through the eustachian tube; but instead, ventilation is often prevented; if not, infection may enter the middle ear during ventilation.

To understand the progressive steps of acquired deafness, we must by a logical deduction have an appreciation of the immediate and remote sequelogical steps, especially those produced by a departure of the normal aerostatic and physiological relations of the upper respiratory tract, and the middle ear. Then, and not till then will the prognosis be more favorable; because the treatment will be more rational, removing the cause rather than treating the deafness which is a sympton.

Feeling the necessity of a classification for deafness, I have borrowed the fever classification, reversing its order from continued, remittent, and intermittent, to intermittent, remit-

tent and continued deafness, in order to associate the three degrees of deafness with the three stages of chronic catarrhal otitis media, of which they are the exponents. Like every chronic inflammation of the mucous membrane, it passes through three stages. The chief characteristics of the stages are:

1. Hyperæmia or acute inflammation with secretions or exosmosis of serum.
2. Hyperplasia of the connective tissue, and
3. Sclerosis or atrophy of the hypertrophied tissue.

These three stages seem to have a selective affinity for certain ages, especially the first and second. The first begins in children, and emerges into the second about the age of puberty. The third is the retrogression of the second whose initiation and duration is dependent upon the degree and rapidity of the first two stages.

To apply the reversed clinical interpretation of the fever classifications, as the fever goes above normal, the hearing below; then intermittent deafness is a temporary impairment of the hearing, that returns to normal when the cause is removed—therefore, there can not be any permanent pathological lesions. These causes are aerostatic disturbances, plus the congestion and secretions found in the first stage of catarrhal otitis. All three may be active at the same time, but generally one predominates the others.

Remittent deafness is in those cases where the hearing is always below normal but at times from such transient cause as found in the first stage of catarrhal otitis; the hearing goes below its normal, and returns to its average when the cause subsides. It is generally associated with the second stage of chronic catarrhal otitis. The thickened and congested mucous membrane stiffens the muscles and joints of the ossicles, which reduces their sensitiveness to sound waves.

Continued deafness is in those cases where the hearing is so much impaired that the victim is at a social and financial loss. It is the exponent of the third stage of chronic catarrhal

otitis, produced by the atrophy of the hyperthrophic connective tissue, which by its cicatritial contraction ties down the muscles and ossicles so firmly that ankalosis of the joints may develop.

Let us for illustration take adenoids, the most frequent and the most positive local factor in children; which produce by obstructing the eustachian tube, aerostatic disturbances and hyperæmia of the tympanic cavity with secretions:

1. By direct pressure against the mouth of the tube.
2. By producing secretions which block the fossa of rosenmuller and the tube.
3. By producing active or passive congestion or acute eustachian catarrh.

These produce a temporary stricture, prevent ventilation of the tympanic cavity; converting the middle ear into a closed cavity filled with air.

It is a well established fact that air imprisoned in a closed cavity in the human body will be absorbed, rarefying the air or producing a vacum. Owing to the non-collapsible bony wall of the tympanic cavity the force of the vacuum is inevitable. Nature's first aid to prevent the vacuum is by retracting the drum; the air pressure being greater externally than internally, fixes the drum, which in turn fixes the ossicles—making the whole of the sound conducting apparatus more or less stationary—blocking its function; producing a typical intermittent deafness, which is easily demonstrated by politzerzation. If ventilation is not re-established the increased force of the vacuum puts the mucous membrane and the blood vessels on the stretch, plus the tension of the drum and the pressure of the stapes in the oval window of the cochlea produces the primary pain in acute otitis media. This fails to prevent the vacuum, as the absorption of the air continues— the capillaries in their crippled condition, through a spirit of revenge, pour out enough serum to restore the equilibrium, relieving the pain but not the deafness. Now, should the vessels have reached a paralytic state from the minus ten-

sion of the vacuum or from toxins, the middle ear will be left to the mercy of the force of the heart, which will continue to pump serum or sero-blood into the tympanic cavity; swinging the drum from its retracted position to extreme distention, looking as if it would pull the ossicles from the attic.

Now nature's last resort for compensating is gone, and the pressure increases till it equals or exceeds that in the capillaries and produces secondary pain by distortion and pressure on the inflamed area; which pressure, if sufficient will cause necrosis for want of nutrition. This is an exaggerated form of serous otitis. Tympanotomy is indicated to prevent sloughing. But more often they do not reach this stage, the serum is absorbed as the cold improves and ventilation is re-established. The mother's diagnosis is neuralgic earache—for it did not run—but have we not the clinical assurance of a local cause, the neuralgia being a sympton? Many of these attacks covering a few years complete the first stage of chronic catarrhal otitis, and establish the second stage which we have mentioned. On the other hand should any pathological bacteria have been harbored in the tympanic cavity before, or entered during the attack by a forcible effort to blow the nose—they now have found nature's culture media for their propagation. The condition rapidly passes beyond an acute serious otitis media to a typical acute purulent that needs no introduction to you; but, often has the ability to baffle our wits, defy our attacks, inflict unbearable pain upon our patient, and may retreat into the mastoid antrum, setting up an acute mastoiditis. Should it become chronic, it will lay waste to the beautiful ossicular structure of the attic; perforate the drum, destroy the hearing; and may by a necrotic process eat through the tympanic plate, striking down its victim with an explosive septic meningitis or a brain abscess.

More than seventy-five per cent of the treatment is to return to nature the physico-physiological relations of the upper respiratory tract and the middle ear; by re-establishing

nasal breathing and then re-establish ventilation of the tympanic cavity through the eustachian tube; by removing adenoids and tonsils, especially in children, and by the correction of septal deviations, and by the removal of septal ridges and spurs in adults—then if present reduce the intumesant or hypertrophic rhinitis, or chronic naso-pharyngitis; which are frequent sequelæ of the above. Remembering that chronic catarrhal naso-pharyngitis often extends by continuity through the tube into the tympanic cavity; and may close the gateway of ventilation by a hyperthrophic stricture of the tube. Unless this obstruction is removed the deafness will progress regardless of the other treatment.

This brings us to the pinnacle where the pathological sentence of continued deafness is passed upon thousands for life; for the hyperthrophic tissue will advance in strict obedience with the law which governs all newly created connective tissue, and by its cicatricial contraction produces an organic stricture of the eustachian tube; ventilation is impossible. The aerostatic, vascular and nutritional disturbance will be permanent, the pathological condition progressive, slowly but surely destroying the remaining physiological function of the middle ear.

The last suggestion that I want to drop is, that the politzer bag in these cases is just as inefficient to dilate an eustachian structure as is the vis—a terge of the bladder to dilate an urethral stricture during urination—and in the former as in the latter sounds and bougies must be used.

THE ANTITOXIN TREATMENT OF DIPHTHERIA.

By C. O. Abernethy, M.D., Raleigh, N. C.

Prior to 1895, during which year diphtheria antitoxin was first generally used in the United States, diphtheria was, to both country and city physicians, one of the most dreaded diseases which they were called upon to treat, whole families of children being swept out of existence in a few days while the doctor was powerless. But now the professional verdict is unanimous, and the discovery of antitoxin treatment of diphtheria is classed with the discovery of vaccination for smallpox as one of the great triumphs of modern medicine. And the disease which was once so much dreaded has become to be considered not so serious, provided, one can reach the patient in time and make the diagnosis early.

Before considering the treatment of diphtheria let us first discuss briefly the etiology and pathology of the disease.

Diphtheria is caused by the bacillus discovered by Klebs in 1883, and isolated by Loeffler in 1884. Hence the name Klebs-Loeffler bacillus. The bacilli may lodge on any mucous membrane or abraded surface but the usual site is the mucous membrane of the tonsils, pharynx, nose, larynx, trachea, or bronchi. Here a croupous inflammation is set up and "the mucous membrane is congested, swollen, and infiltrated and its surface is coated with a false membrane composed of fibrin, pus, and necrotic epithelium." The bacilli acting on the mucous membrane liberate toxins which very quickly begin circulating in the blood, and to this is due the more serious complications and results of diphtheria, such as the degeneration of muscular, nerve, and epithelial tissue and organs of the body.

The chemical composition of the diphtheria toxins, according to the theory of Ehrlich, is that they are composed of three principal compounds—toxin, toxone, and toxoid. The

toxin is the active poisonous constituent and causes the high fever, prostration, cloudy swelling, and later, fatty degeneration of the heart muscle, kidneys, etc. This is what causes death when it occurs suddenly in an acute attack of diphtheria. Toxone attacks the nerve cells and is generally slower in its action than toxin. Late paralyses of the muscles of the throat, respiration, and heart are supposed to be due to the action of toxone. The toxoid is not poisonous but has the power of neutralizing antitoxin, making it necessary to give large doses of the serum.

The importance of an early diagnosis in diphtheria can not be over-estimated, for upon the early recognition of the disease and administration of antitoxin depends in a very large measure the outcome. The majority of the cases of diphtheria have a comparatively gradual onset, with moderate fever, slight muscular pains, sore throat, swollen and tender glands in neck, tonsils swollen and covered with grayish or yellowish white membrane which when forcibly stripped off leaves a bleeding surface. Tonsilitis, on the other hand, generally has a sudden onset, with distinct chill, high fever, intense muscular pain especially in the back, and with systemic symptoms more pronounced than the local. But no matter how much experience a man may have in clinical diagnosis there are cases which he can not distinguish without the aid of cultures. It is my belief that every case of suspicious sore throat should have a bacteriological test. This can be easily had and no time lost. Each doctor can get a supply of tubes from the State Bacteriologist, and when he has a suspicious case take a swab from the throat of the patient and administer antitoxin immediately. Send the swab to the State Laboratory requesting that the doctor be notified by telegraph the result of the examination. In twenty-four hours an answer can be had. Thus no time is lost and no risk taken if the case happens not to be diphtheria, because the antitoxin is absolutely harmless when given

to a person without the disease. But if the case proves to be a true case of diphtheria the physician has gained twenty-four hours time, which is invaluable.

In nasal diphtheria of a mild form, which is responsible for many of the outbreaks which can not be traced to the source of infection, a cultural diagnosis is the only correct means. For here the membrane is late in appearing in the throat where it can be seen. In laryngeal diphtheria a culture may not be of any assistance, because the membrane is situated so far down in the throat that the swab can not reach it. But the diagnosis of laryngeal diphtheria is generally easily made where one finds marked dyspnea with rigidty of the sterno-cleido-mastoid muscle, with supra-clavicular and sub-sternal retraction, provided one can exclude retro-pharyngeal abscess, peri-tonsilar abscess, and a tumor pressing on the larynx.

One argument against the extensive use of antitoxin in the treatment of diphtheria is its cost. We must admit that at first glance this does seem a difficulty. But when we consider that before the advent of antitoxin the number of visits to the patient was greater and therefore the doctor's bill larger, then we see that part of this item disappears. Also we must remember that we have a human life at stake and expense should not be considered. But it will be said that some people can not buy the antitoxin at any price. So it would be with any other drug used. For that reason I think it the duty of every town and county to furnish drugs for its poor, and I think we as physicians should try to get that plan adopted by our town and county boards. It is in vogue in some of our cities and works admirably. The cost of the serum is great on account of the expense the companies have in preparing it and the method of exchanging the tubes after certain dates.

In the preparation of antitoxin the strictest antiseptic precautions are observed, thereby eliminating the idea that at

times septicæmia is caused by the injection of antitoxin. Large flasks of pepton bouillon are innoculated with pure virulent cultures of the diphtheria bacillus, and set aside in incubating rooms from three to five days. During this period a large amount of diphtheria toxin is formed. Trikresol is then added to kill the bacilli, which are separated from the toxic fluid by filtration. The toxin after being standardized is injected into the horse. A hypodermic injection of a very small quantity is given, which dose is gradually increased and repeated every few days. As this is kept up for several months the horse gradually acquires a tolerance to the toxin, and his blood and tissue juices develop antitoxic power. Then the horse is bled and if the serum is of the required standard the blood is set aside until the serum containing antitoxin separates from the solid constituents. The serum is then put up in sterile syringes ready for use.

The dose of diphtheria antitoxin is variously given by different authors. The United States Pharmacopœia gives 500 units as an immunizing dose and 3,000 units as an average curative dose. In the administration of antitoxin more so than in any other drug the dose should be large enough and repeated often enough to get the therapeutic effect. The tendency of the profession is to give small doses of antitoxin, due probably to its cost. In addition to this there is an idea that its administration is dangerous. But, on the contrary, the real danger is in not giving enough. It has been proven that a dose insufficient to neutralize all the toxin is practically useless, as the patient will die as surely as if no antitoxin were given. It has been claimed that the majority of deaths by late paralysis are due to insufficient dosage. The best effects are produced by giving large doses and repeating often. The argument that antitoxin produces heart paralysis has no foundation whatever. There are no cases on record, so far as I can ascertain, where antitoxin has had any ill effects upon the heart. The tendency is rather to strengthen a weak

heart. The only ill effects produced by large doses of antitoxin are the arthralgia and urticaria. And these are produced at times even by small doses. There has been no limit set to the dose of antitoxin, and the only safe rule in administering the serum is to give it until one gets the characteristic reaction of the membrane shriveling, the odor becoming less fetid, the pulse stronger, and the general condition of the patient improved.

The greatest advantage is obtained from antitoxin if it is given at the earliest possible moment of the disease, as it often prevents the formation of the membrane if given early enough. The report of the Massachusetts State Board of Health for 1902, gives the following statistics bearing on this phase of the subject:

"In the cases in which antitoxin was given on the first day of the disease the mortality per cent was 7.9; when the serum was given on the second day the percentage was 6.2; when it was given on the third day the percentage was 9; on the fourth day the percentage was 12.9; on the fifth day the rate was 15.9 per cent; on the sixth day and later the percentage was 17.6."

Of course there is the possibility that the cases cited here as given on the first day were really the second, as the doctor generally sees the patient late; but even taking that into consideration, the importance of early administration of the serum is readily seen, as the mortality per cent on the first day is given as 7.9, and on the sixth day as 17.9, showing a difference of 10 per cent.

In speaking of the amount of antitoxin to be administered prominent authorities say that in the early stages of the disease from 4,000 to 6,000, or even 8,000 units should be administered, and this should be repeated every six to eight hours, depending upon the condition of the patient and the appearance of the membrane. No patient ill with diphtheria should be considered hopeless, for the heroic administration

of antitoxin has saved many patients which were apparently moribund.

In laryngeal diphtheria the importance of early administration of large doses of antitoxin is readily seen. If the patient has that peculiar brassy cough, rigidity of the sterno-cleido-mastoid muscles, and dyspnea, antitoxin should be given at once in doses not less than 4,000 to 8,000 units. This will often relieve the distressing symptoms, and the patient will rapidly improve. But if the symptoms get worse in six to eight hours intubation or tracheotomy should be performed, and the dose of antitoxin repeated. If the tube becomes clogged by a thick, tough, tenaceous mucus it is a symptom of extension of the diphtheritic process to the bronchi. Then antitoxin should be administred in large doses, such as 20,000, 30,000, or 40,000 units. This is the only hope for the life of the patient, and many are saved by this method.

The following cases might be of interest bearing on the subject of large doses of antitoxin:

From the Boston City Hospital the case of a man 19 years of age, who had been ill three days when admitted. He had enlarged cervical glands, with great tenderness; a profuse nasal discharge; tonsils greatly enlarged, meeting in the median line, and covered with a thick diphtheritic membrane; uvula covered with membrane; profound prostration. The patient had 90,000 units of antitoxin in five days, and was discharged from the hospital with complete recovery in thirty days.

Another case from the same hospital was a girl eleven years of age. Ill two days when admitted to the hospital. Her condition was as follows: Marked prostration, profuse nasal discharge, extensive membrane on the tonsils and uvula, a strong fetid order, action of the heart irregular and the sounds indistinct. In four days she received 52,000 units of antitoxin and was discharged well in thirty-nine days.

Both of these cases had urticaria and arthralgia but did not experience much discomfort therefrom.

In my own practice I will mention two cases, the first a litle boy four years of age. I saw him on the second day of the disease, and on examination found both tonsils covered with a thick diphtheritic membrane, with spots on the uvula; breathing was labored and child had anxious expression and flushed face. I gave him 3,000 units of antitoxin and called to see him again in six hours. His condition was worse and there were signs of extension of the membrane to the larynx. Administered 4,000 units of antitoxin and when I saw the patient six hours later his breathing was easier, and his general condition much improved. He made an uneventful recovery.

The second case was a boy seven years of age who had a case of nasal diphtheria, which was diagnosed on the third day of the disease. Three thousand units of antitoxin were administered and the dose repeated in twelve hours. His condition grew worse, the membrane began to extend to both tonsils and uvula, heart became weak and irregular and very slow. The antitoxin was then administered every six hours and the dose increased to 6,000 units. In five days the patient received 26,000 units of antitoxin and began to get better. He made a slow recovery, having had otitis, which was difficult to control. Was troubled very slightly with urticaria and arthralgia.

Many other cases might be cited where large doses of antitoxin have been given, but the above are sufficient to show the distinct advantage of heroic administration of the serum in very severe cases of diphtheria.

In conclusion I wish to quote Dr. John H. McCollom, Instructor in Contagious Diseases, Harvard University, and Resident Physician, South Department, of the Boston City Hospital, who has perhaps had as much experience in the treatment of diphtheria as any one man in the United States. He says:

"No hard and firm rule can be made regarding the use of

the serum. The agent must be given until the characteristic effects are produced on the diphtheritic membrane. In some cases 4,000 units will accomplish this; in other instances, 60,000 to 70,000 units may be required. In the case of a patient ill with diphtheria there is no way of estimating the quantity of toxin generated by the membrane, and, therefore, one must administer the agent until its characteristic effect is produced, that is, the shriveling of the membrane, the diminution of the nasal discharge, the correction of the fetid odor, and a general improvement in the condition of the patient. In the operative cases the beneficial effect of large doses of antitoxin has been marked, preventing in many instances the extension of membrane to the smaller ramifications of the bronchi.

"No case of diphtheria should be considered hopeless. Antitoxin should be administered in each and every instance. It has been my experience during the past few years to see so many patients, apparently hopelessly ill, recover, that my convictions are very firm on this subject. When the membrane covers the tonsils and uvula, profuse sanious discharge from the nose, spots of ecchymosis on the body and extremities; cold, clammy hands and feet, a feebly pulse, and a nauseous odor of diphtheria, and I find after the administration of 10,000 units of antitoxin in two doses the condition of the patient improves slightly; that after 10,000 units more have been given there is a marked abatement in the severity of the symptoms, and that when an additional 10,000 units have been given the patient is apparently out of danger, and eventually recovers, one must believe in the curative power of antitoxin. When one sees a patient in whom the intubation tube has been repeatedly clogged, and when the hopeless condition of the patient changes for better after the administration of 50,000 units, one can not help but be convinced of the importance of giving large doses of antitoxin in the very severe and apparently hopeless cases. In the

majority of instances these large doses are not required, particularly if the patient is seen early in the attack—4,000 to 6,000 units being generally enough to produce the characteristic effect on the membrane. In the treatment of grave types of the disease, small doses of antitoxin are of little avail."

It is evident from the facts presented—

1. That the use of antitoxin is the only scientific treatment of diphtheria, and that it should be classed among the great medical discoveries of the nineteenth century.

2. That early administration of the serum is necessary to obtain the best results.

3. That very large and almost unlimited doses of antitoxin are required in the treatment of severe types of diphtheria.

THE EFFICACY OF VACCINATION.

By J. R. Paddison, M.D., Oak Ridge, N. C.

In presenting this subject I shall deal briefly of facts which were demonstrated to me in an epidemic of smallpox which occurred last winter in my practice.

Being employed as resident physician regularly for the past five years for the student body of Oak Ridge Institute, I have learned, by experience, to be on the lookout for almost any sort of outbreak, epidemic in form, early in the spring term—this is easily accounted for—with two hundred young men from every part of the State spending their Christmas vacation at their respective homes, it is almost impossible to avoid an exposure to some of the exanthematous epidemics which are more or less constantly abroad in our land.

Through January I had kept a close eye upon every case which came under my observation, but nothing of consequence developed, so I began to "breath easily" as we were about to pass through incubation periods without a vestige of trouble.

My tranquillity was soon to be disturbed, however, for on the fourth of February I was called to see a student who had been slightly indisposed for a few days, but had not seen fit to call me in. Upon examination, I felt sure we were up against the real thing, viz: Smallpox. Held him in quarantine for twenty-four hours. At second visit felt positive of my diagnosis and called Dr. Harrison, of Greensboro, in to see the case. Dr. Harrison verified the diagnosis. Now gentlemen, here was a problem to deal with. Two hundred boarding students, in different dormitories, at least fifty per cent of whom never having been successfully vaccinated, a genuine case of variola in their midst, and every one having been exposed. It is true this exposure would not be considered very dangerous so early in the game, but to make

a bad matter worse, we found two other students who said they had been "feeling bad" about two weeks previously and shortly afterwards had a very slight "breaking out" on them. From an examination of one of these cases, neither Dr. Harrison or myself were able to say whether there had been other cases of variola in our midst, but it gave us no little concern I can assure you, especially since one of these probably cases had been occupying the same room all the time with the now genuine case of smallpox.

At this point I had a consultation with the Professors Holt, principals of the school. We wanted to avert a panic amongst the students, for surely it would have been short of criminal to have allowed these students who had been exposed to this dreaded disease go to every part of the State and perhaps thereby scatter the infection to the four winds.

We did not care to force vaccination too strongly, for in this instance coaxing was surely more efficacious than driving. Absolute quarantine of all boarding houses and dormitories was very impracticable. Something must be done at once, so this course was pursued. The case in hand was isolated. General vaccination was instituted at once, the entire faculty, students, and boarding house people submitting readily to the operation, save a few "vaccination cranks" amongst the students. Now a house of detention was established, into which any suspects might at once be placed. This building was at once christened by the students as "Palace a la Variola."

You may be sure this palace was not the goal to which many were striving to attain.

This completed our *modus operandi*, except to instruct every student who suffered from the slightest indisposition to report at once so as to allow me to keep close watch over him.

What was the outcome? From this moment on we had the situation well in hand. Two days (namely, February

6th), after the first case was discovered another case developed in the same house and in an adjoining room. This case was at once removed.

There were only five students who flatly refused to be vaccinated. Of this number, one went home, he, by the way, being a physician's son and having instructions from his father to come home rather than have his arm scratched. The remaining four stayed at school and within periods ranging from twelve to eighteen days these four anti-vaccination enthusiasts needed no vaccination, nor little did they care about the achievments of Jenner for each in his turn developed smallpox and had a pleasant (?) sojourn of three or four weeks at "Palace a la Variola." Only one other case of interest need be noted. A young man who was vaccinated for the first time developed varioloid just twelve days after vaccination.

A brief resume of this paper:

1. There was unquestionably a general exposure to about three hundred people, forty to fifty per cent of whom had never been vaccinated.

2. All persons exposed were either primarily or secondarily (re-vaccinated) vaccinated, except five persons—who had never been vaccinated.

3. There was not a single case of variola developed in any person who had at any previous time been successfully vaccinated, or who was successfully vaccinated at this time.

4. Of the five unvaccinated persons, one was lost sight of, and the other four developed smallpox, each case developing at different and widely separated dormitories.

5. Only on case which was vaccinated (and this was has primary vaccination) developed a rash. This was spoken of above as the case of varioloid.

I had collected some very interesting statistics and history relative to smallpox and vaccination, but will not tax your patience with this, for any of us can readily look up both

of these at leisure moments. The clinical cases herein reported impressed me so forcibly and demonstrated in such an unquestionable manner the efficacy of vaccination, I wished to make a report of same, and possibly this report will not only strengthen the confidence of some physicians, but some of the laity, in the principles which were first demonstrated to the world by the great Jenner, and which have been worth so much to suffering humanity.

Just one more word and I have finished. A great deal could be accomplished to overcome the prejudice in the minds of many, which now exists against vaccination, by exerting greater care and more aseptic methods in the operation of vaccinating. My plan has been to scrub arm vigorously with hot water and soap, then with alcohol. Now use a sterile scarifier, being very careful to make a very small and superficial abrasion of the skin and avoid drawing blood if possible. Apply virus and rub gently with point of scarifier. Allow to dry. Now pin a clean handkerchief (better a sterile cloth) loosely about arm and allow it to remain there for twenty-four or thirty-six hours. This prevents friction from the sleeve and keeps the wound perfectly clean. Give patient instructions about how to care for the arm, and in very few cases will there be a "bad arm" following vaccination. Avoid infecting the arm and we will overcome many of the disagreeable features connected with vaccination at the present day.

THE INSURANCE EXAMINER.

By J. T. J. Battle, M.D.,
Medical Director of Greensboro Life Insurance Co., Greensboro, N. C.

As every member of this Society is very probably an examiner for some life insurance company, I feel emboldened to write along these lines.

The medical examiner is appointed by the company because of his personal integrity and professional ability. Success depends largely upon prompt and faithful performance of his duty. He is expected to protect the interest of the company by honestly recording, impartially and fully, every important fact he can elicit in both family and personal history. Both the applicant and agent may be his friend, possibly patron, but that must not prevent him giving any information necessary to assist the medical director in determining whether or not the applicant is a suitable subject for life insurance. If he has information, which would be against his interest to disclose, report direct to the medical director with the assurance that it will be treated with strict confidence. The company has a perfect right to all the information he can obtain, and if he should elicit or discover, in the examination, any fact which would affect the risk or longevity of the applicant, which is not covered by the questions, write direct to the medical director in order that he may be able to come to a prompt and just decision.

The applicant's examination should represent a complete pen picture, which will present him, as near as possible to the medical director just as the examiner sees him. If successful in doing this, it will make the work easier at the home office, and will prevent much annoying correspondence and delay; and may often save an applicant, that might otherwise be declined or prevent the company losing a policyholder. The indifference of many people to life insurance,

and the sharp competition with other companies, renders it absolutely necessary to be prompt in making examination of the proposed risk.

The examination should be made ina quiet, private place, and the examiner should take plenty of time to prevent making mistakes, as he will not have an opportunity to change his decision at some future interview. The presence of a third person is not permitted, as it is apt to lead to evasion and concealment of facts, as the applicant may have had some disease which he is willing to confide to the doctor, but not to the agent or some other person. Ask each question clearly, be sure that it is understood by the applicant, and write the answer in such a way as will explain in a concise manner everything the question is intended to reveal. Courteous language in a conversational manner will always elicit the desired information. After completing the report, it should be carefully reviewed for the purpose of ascertaining that every question has been answered and with such fullness as to convey exact information the home office requires. Failure to answer the questions in the examiner's report, or answering them indefinitely, requiring the return of the report for completion, or waiting for an explanation of some answer, are some of the most annoying and unnecessary causes of delay in the transaction of business.

It will be well for the examiner to remember that his examination will be critically reviewed, and will be compared with the work of hundreds of other examiners, and that his opinion may be contradicted by the examiner of some other company, therefore, he should be strictly honest with himself and the company, and make examination so throughly and so carefully he will never fear criticism from any source.

After finding, by thorough investigation and expense, the best M. D. in a community, I have oftentimes been humiliated and chagrined to find that a dry goods clerk, a village postmaster, or a lawyer, in making a confidential report, gives a better opinion, not only of the appearance of the risk,

than the paid examiner, but gives the result of former diseases which otherwise would or had escaped notice. I could give many instances which would astound the profession. Of three deaths we have had, a paid non-medical reporter advised against taking the applicants, our medical examiners recommended them as "first-class." I stood to my profession and it cost the company thousands of dollars.

The home office reserves the right to send their medical inspector to examine any applicant when the medical director thinks such action necessary. The medical director takes nothing for granted, and that which appears but a trifle to the examiner, may, if unexplained, lead to rejection. It is assumed that when the examination is completed it represents the best knowledge of the case obtainable by the examiner.

Family History—This is frequently misrepresented and the examiner will appreciate that the medical director should know not only that the applicant is free from disease, but also that he is free from any predisposition to it, and this the family history must show. Various misleading terms such as, debility, exhaustion, cold, bronchitis, throat trouble, dropsy, decline, heart failure, grief, child birth, overwork, change of life, female disease, "don't know" being given as the cause of death does not afford sufficient information. They are constantly used but are indefinite, inexact, and often misleading. Do not use them, or let them pass without giving a full explanation. When the cause of death is given as throat trouble, cold, exposure, bronchitis, decline, or grief, and there is no explanation, the presumption is that the person died of consumption. If the cause is given as child birth, find out whether it was the beginning of phthisis. Investigation has shown that persons whose mothers died in "child birth" so called, have a mortality slightly greater than where death was given as consumption or twenty-eight per cent above the expectation.

When the statement is made that the living members of the

family are in "fair," "moderate," or "poor health," the exact cause of impairment must be ascertained and answered in direct, concise, and specific language. When not so explained, it is taken for granted that the malady is fatal, and is an inherited disease, and may cause applicant to be declined.

Additional information of great value can be given by reporting whether the applicant does or does not reside in the same house with tubercular patients. The direct transmission of the disease from one person to another is so well authenticated that we need all possible enlightenment about those exposed. Resemblance to parents who have been subjects of special disease, as tuberculosis, alcoholism, apoplexy, rheumatism and gout, is helpful evidence in doubtful cases. If parents died of paralysis or apoplexy the arteries should be very carefully examined.

Occupations—Certain occupations are considered hazardous and persons engaged in them are usually un-insurable. Do not give the occupation as, clerk, book-keeper, merchant, laborer, or operative, without describing fully the nature of his work. Care must be taken to describe definitely the exact nature of the business, or work in which he is engaged. As many policies have the accident feature the importance of this feature will be readily realized.

Past History—The past history of an applicant should be obtained with great care. Inquiry should be made about every disease the applicant has had since childhood. What it was, how long sick, whether or not recovery was complete, also the physician who attended him, as reference can then be made to such physician by the medical director. Note particularly the following questions, observe closely the accompanying suggestions: Have you ever had colic? This has been answered "Yes" several times, without explanation. Once, after writing three letters, it was found that the applicant was having periodical attacks of biliary colic, another instance after considerable delay it was brought out that he

had eaten too heartily and was soon permanently relieved. Another "Yes" developed into appendicitis which a little later required operation.

Are you subject to headaches? If so, and frequently, the cause should be searched for and explained. An applicant who has habitual headaches is not insurable.

Do you, or have you ever had asthma or hay fever? A previous history of this calls for exceedingly careful examination of lungs, heart, blood vessels and urine. The distinction should be made between asthma, hay fever and acute rhinitis.

Have you ever had rheumatism? If so, find out how many attacks, when he had last attack, and was it muscular only or acute inflammatory, and what joints were affected. Pneumonia should postpone applicant one year.

Have you ever had dyspepsia? When was the last attack, and if he is still subject to it, did it cause him to lose flesh, and are there any symptoms of tuberculosis? This is often the only one of incipient phthisis, a young applicant twenty per cent under weight who has dyspepsia is not insurable.

In reviewing fifty-four declinations, which were declined on account of personal and family history, *twenty-nine* were recommended by the examiners as "first-class" risks, *fifteen* "good," *six* "fair," *four* were not recommended. In tabulating the mortuary list and finding the causes of death to have been chronic phthisis, Bright's disease, it was decided to put in the field a medical inspector whose duty it was to visit every policy-holder to find out how carefully and in what manner he or she was examined. That information was gathered by a competent and painstaking physician, and a critical study of that tabulated data leads to this conclusion; that seventy-eight per cent of those examinations were about the same as the industrial companies get for $1.00 and that the twenty-two per cent were made by competent and conscientious physicians well worth the price and the company gladly paid it.

EPILEPSY—ITS TREATMENT.

By G. Kirby Collier, M.D..
The Craig Colony for Epileptics, Sonyea, N. Y.; Member North Carolina Medical Society, American Medical Association, National Association for Stndy of Epilepsy and Care and Treatment of Epileptics.

"Epilepsy is a disease or disorder affecting the brain characterized by recurrent paroxysms which are abrupt in appearance, variable in duration but generally short, and in which there is impairment or loss of consciousness, together with impairment or loss of motor coordination, with or without convulsions." (Spratling.)

According to statistics gathered by various observers, one person in every five hundred of the population has epilepsy, and by some the ratio is even stated as high as one to every three hundred.

Epilepsy has been recognized and studied since the day of Hippocrates, the Father of Medicine, and no better description can be had of the disease as ordinarily considered than that given in his works. But it is only during the last decade or two that any especial study has been given to the pathology of the disease. Owing to the many advances made in clinical methods and in pathological technique, there has been an increasing interest taken in the clinical studies of epilepsy and as a result, the field of epileptic therapeutics has grown larger. The introduction of the use of bromides in 1857, also served as an impetus to clinical study.

The epileptic had long been looked upon as incurable and it was the custom and still is in some communities and States to place him in the county house or jail to eke out his miserable existence as best he may. He was given merely custodial care and oftentimes not even that, but allowed to wander and roam at will and often at the mercy of evil designing persons. He was cast aside as incurable and only when his mental condition reached a stage of dementia, or acute mania

following seizures, did the authorities see fit to take him in charge, in order to prevent his doing any injury to himself or others.

Since the introduction of the use of bromides, the percentage of recoveries from this most horrible of all man's afflictions has increased, until to-day we are enabled to state that from 4 per cent to 12 per cent of all epileptics recover. This includes the epileptic idiot and imbecile, for whom but little can be done. Were it possible to recognize all epileptics early and place them under treatment before the so-called "epileptic habit" is formed, I doubt not that the recovery rate would be doubled, and *it is possible* to recognize the condition in its early stage.

The treatment of epilepsy can be divided into three divisions:

1. The Moral or Hygienic,
2. The Medicinal,
3. The Surgical.

The plan of treatment which is applicable in one class of cases is not efficient in another; for example, the treatment of the so-called idiopathic congenital epileptics differs widely from that of the traumatic and toxic cases. In the one class, we find that the bromides exert a favorable influence, while in the others we may find a most deleterous effect. As in all other diseases, we have learned to treat the individual more and more. In the past the treatment was directed at the one sympton—the subjection of the convulsive seizure—but to-day the individual is receiving more and more attention and the "fit" is being relegated to its proper place in treatment.

1. Moral Treatment.

By moral treatment, I mean the careful regulation of the diet and habits, discipline and the education of the patient—the highest possible development of the physical, mental and moral states. Every epileptic is, at times, an irresponsible

agent, and his mental condition at these times should receive careful consideration at the hands of his medical adviser and attendants. He should be taught habits of obedience, restraint of the passions and appetite. His mental and physical activities should be controlled and industrious habits instilled. His education should not be neglected on account of his disease, as many epileptics have become sufficiently skilled in various arts and trades to compete with non-epileptic individuals. Many of the world's great men were epileptics, great in spite of their epilepsy. Among these may be mentioned Caesar, Napoleon, St. Paul, Petrarch, Mohammed, Handel, Swift and Richelieu.

In order that this so-called moral treatment may be carried out more properly, colonies and hospitals for the separate care and treatment of epileptics have been established in many States in this country and abroad, most prominent among these being the Ohio Hospital for Epileptics at Gallipolis, Ohio; The Craig Colony, at Sonyea, N. Y.; the Massachusetts Hospital, at Palmer; the New Jersey Colony, at Skillman; the Kansas Hospital, at Parsons; the Bethel Colony, at Bielfiel, Germany, and many others both in this country and abroad. The epileptic is receiving more and more consideration at the hands of the medical profession and the charitably inclined public, and I am very glad to know that North Carolina will in the not distant future make some provision for her dependent epileptics. Not only from a humanitarian standpoint should this be done, but from an economic view also. Institutions for the insane, the tubercular, and general hospitals for the acute sick have been established, but no provision is made for the epileptic.

The Colony system, as practiced to-day, has been attended with the most excellent results. Such institutions consist usually of a large tract of land, suitably located, with access to the centers of population, but sufficiently distant therefrom to escape its hurtful influences. Small buildings or cot-

tages are erected instead of the usual large dormitories, each building being separate and independent of the others and having its own kitchen and dining-room. They are made as home-like as the appropriations will permit and the patient is made to feel that this is to be his home, for a while, at least, and probably for the remainder of his days. Everything tending towards institutionalism is thrown aside and the institutions are really villages in themselves. Various industries are carried on, and large farms and gardens are conducted, both to permit of the patients working out of doors and in order to lower the cost of maintenance.

The one idea is to induce the patient to return to the simple mode of living, to live nearer to nature, as it were, and to throw off all that is artificial in life. The patient is under the absolute control of his medical advisers and everything conducive to his welfare is done for him. A hospital is built to which all the acute medical and surgical cases may be transferred, and where the patient on admission may be held under observation. The cost of maintenance under the Colony system is found to be even less than that of the Hospital system. Although more individual households are maintained, there are a larger number of patients of the working class.

In such instutions, where the patient may be seen daily by his physician, and his every move regulated, the treatment is far more effective than in general practice. His diet is carfully regulated both as to quantity and quality. Much has been written on diet in epilepsy, but I think the rule as to the individual should govern in the greater number of cases. Spratling sums up his dietary as follows: "The principles underlying a suitable diet for the epileptic are simple. They embody the use of bread stuffs, butter, milk, cereals, etc., to the exclusion of too much meat, pastry and other less digestible articles." The toxic origin of many cases of epilepsy indicates that a more rigid dietary should

be instituted in these, and in all cases it should be remembered that the epileptic is a natural gourmand and the quantity of his food should be carefully regulated. Gastro-intestinal disorders, especially constipation, intestinal fermentation, etc., often act as determining causes of the convulsive seizure and the closest attention should be given to the diseases of the digestive organs and their activities. As alcohol and tobacco increase the irritability of the nervous system, they should be scrupulously avoided. In many cases it is advisable to restrict the patient to a strictly vegetarian regime with the addition of milk. Later fish and eggs may be added and the nitrogenous food-stuffs increased slowly. Turner advises the use of the purin-free diet in the more recent cases of epilepsy and in those having seizures of the Grand Mal type which occur in series. Careful attention should be given to the proper preparation of the food.

As has been shown, the bromide salts exert very unfavorable action upon the gastro-intestinal tract, and many of the digestive disorders met with in epileptics will clear up rapirly when the Bromides are discontinued.

The average admission to institutions for epileptics is found to be taking large doses of the Bromides, either in the form of one of the many so-called "epileptic cures," so extensively advertised, or he has with him a mixture of the Bromide salts ordered by his medical adviser. He is found on examination to be thin, pale, anæmic and morbidly depressed; tongue heavily coated, offensive breath, loss of appetite and digestion much impaired. Skin is cold and clammy and is the seat of an acneiform eruption of various types,—papular, vesicular or pustular, and at times ulcers being found. The reflexes are lessened and sensory phenomena are impaired. He has a dull, stupid expression, and there is a tendency toward progressive mental enfeeblement. These cases are not only met with in institutional practice, but are seen daily walking about the streets, an example of what inju-

dicious medication will do. In such cases and in all others a thorough physical examination should be made. The family history and early life of the patient should be inquired into and any possible facts bearing on the case should be noted. The blood, urine, sputum, gastric contents and feces should be examined and treatment instituted as called for. The individual and not the epileptic should receive the first consideration. Any defect in vision should be corrected, enlarged tonsils, nasal growths, adenoids, carious teeth and impacted cerumen should be removed, and any other abnormal condition corrected.

2. Medicinal.

There is no specific in the treatment of epilepsy. Improvement only is noted, when upon a careful study of each individual case, a combination of methods is employed. To do this, it is necessary that he be placed under the absolute control of his medical adviser, as it is well nigh impossible to carry out a strict regimen in the average home; to convince the patient and friends of the many details of living, eating, sleeping and work—all necessary for his welfare. And even though convinced of the wisdom of the advice, they see the many difficulties in carrying it out. The ideal method is that carried out in the colonies or similar institutions. I mean nothing disrespectful to the home, but we may well imagine how difficult it is for a parent to refuse an afflicted child even though she knows that it is injurious to him.

The drugs used in the treatment of epilepsy are varied, the Bromides having held the first place for many years. Much has been written of the abuse of the Bromide salts and justly so, but with it all, the Bromides are most effectual in causing a cessation of the seizures. In a small number of cases they have seemed to have no effect upon the seizures. As to the Bromide salt to be used, there seems to be a wide diversity of opinion and most authorities agree that the best results are obtained from preparations of the mixed bromides,

sodium, potassium and ammonium. The strontium salt is less liable to produce the unfavorable gastric symptoms and acne. The use of the smaller doses, 3 grains three times a day, given with copious draughts of water are many times found as useful as the larger doses. This can be increased to 10, 20 or even 40 grains but should not be continued for any length of time unless the condition of status epilepticus or serial epilepsy develops, and in such cases it is well to combine it with Chloral Hydrate. To obtain any curative results it is necessary to continue the bromides sufficiently long and in such doses as to obtain the physiological action of the drug. The salt may be given alone, dissolved in water or in combination with other drugs as nux vomica, arsenic, chloral hydrate, etc., but in whatever form given, it should be accompanied with large draughts of water. A combination of Strontium Bromide and Sodium Bicarbonate has been recommended by Pugh and the Bechterew mixture of Sodium Bromide with Adonis Vernalis and Codeine has been used with success. Iron Bromide in half grain doses is recommended in those cases requiring the use of hemitinic. Fowler's solution of arsenic has been largely used to combat the skin eruptions of bromism, but in many cases Sodium arsenate is found to be preferable. In those cases in which the Bromides have failed of success, Fleichig recommends the use of opium in sufficiently large doses to keep the patient in a state of mild opium narcosis for six weeks, withdrawing the opium suddenly at the end of that time and substituting large doses—120 to 130 grains daily—of the bromides for two months, after which it is gradually reduced. This is heroic medication, and the patient should be kept under careful observation during the treatment.

Owing to the similarity, both chemically and physically, between the chlorides and bromides, Toulause and Richet, some years ago, recommended the substitution of the bromide salt for the ordinary table salt or sodium chloride, used in the

preparation of and seasoning of the food, for epileptics. Much success has been had with this method of administering the bromides and much larger doses can be given, 10 grains of sodium bromide being as effectual as 30 grains given in the usual way. The disadvantage, however, is that this method is not adapted for home treatment in the average home.

The elimination of the bromides is a slow process, the excretary organs being unable to throw off the excess as fast as it is taken in. To promote elimination I have used a bromide-ferrated-aperient water with some success—an artificial bromide mineral water water. This consisted of a concentrated solution of the sodium, potassium, calcium and ammonium salts, with the addition of magnesium sulphate. The bromides were used in the strength of sodium bromide six parts, potassium bromide three parts, calcium bromide two parts, ammonium bromide one part, and magnesium sulphate eight parts, being added to a quantity of water sufficient to make one hundred volumes of a concentrated solution. It is made a ferrated water by the addition of one fluid ounce of the tincture ferri citro-chloride to the concentrated solution. The dosage of the bromides is easily regulated, and the magnesium sulphate with the large quantities of water ingested has proven beneficial owing to its action on the gastro-intestinal canal, kidneys and skin. The amount of bromides give is approximately eleven grains to the half pint. The object is to have this bromide water take the place of the ordinary drinking water at meal times, two ounces of the concentrated solution being added to one quart of water and the patient given one glass or one-half pint at each meal or as often as the case demands. In my series, no cases of acne developed and there was a marked diminution in the number of seizures.

The hypodermic injection of sterile 10 per cent solutions of the bromides has been recommended, but is often followed by abscesses. In status, injection of sterile solutions of 30

grains to the ounce has been used by lumbar puncture, after 10 to 15 cc. of the cerebro-spinal fluid has been withdrawn.

Bromopin—Bromopin is a liquid compound of bromine and oil of sesame, containing 10 per cent of bromine and is used in one to four dram doses, best given in the form of an emulsion. Very favorable results have been had from its use as a substitute for the bromides. As usually given in the form of an emulsion it is nutritious, increasing the bodily weight. It may be used hypodermically in cases of status, and in infants and young children may be given in the form of enemata.

Borax—Borax has been used with some success, the dosage having been as high as 130 grains daily in some cases, but owing to its ill effect on the gastro-intestinal tract, its use has not been very widespread.

Chloral Hydrate—Chloral hydrate is used chiefly in combination with the bromides in the treatment of status or serial epilepsy. The most favorable combination is two parts of the bromide salt to one of chloral hydrate.

Amylene Hydrate—Amylene hydrate in doses of five minims to one-half dram has proven to be most valuable in some cases, especially those characterized by frequent petit mal seizures, and in the condition of status epilepticus. It has no perceptible influence on the heart and respiration, and may be given hypodermically.

Nitro Glycerine—Nitro glycerine in cases of senile epilepsy with an arterio-sclerosis has been found to be of benefit, and also in those cases accompanied with periodical attacks of migraine. Both nitro glycerine and sodium nitrate are valuable agents in the treatment of the petit mal type of seizures when given in connection with the bromides.

Chloretone—The use of chloretone has not been as widespread as this drug deserves and many of the failures are no doubt due to the large dosage used. Five grains three times a day has been found to produce a most profound somnolence

with hallucinations lasting four or five days. When given in two grain doses it is often followed by a lessening of the frequency of the seizures, without the lethargic condition.

Brometone—Brometone occurs in the form of prismatic crystals with a camphoraceous odor and taste, and is given in doses of five to ten grains three times a day. It may be given in capsules, or better in the form of an emulsion, and is useful in those cases showing an idiocyncrasy for the bromides.

Hyoscine Hydrobromate—Hyoscine is useful in status when given hypodermically, and also in those cases showing a tendency to mental excitement following seizures.

Chloroform—Chloroform is most valuable in controlling the seizures of status or serial epilepsy in order to allow any medication given by rectum to exert its influence.

Dormial—Dormial is an additional product of chloral and amylene hydrate and is given in doses of thirty to forty grains. It is useful in status cases and no injurious effects have been noted from its use.

Cerebrin—Among the animal extracts used may be mentioned cerebrin. In idiopathic cases which have resisted the usual medicinal treatment it has been used with success. It may be given in conjunction with a salt free diet and the use of the bromides. The dose of cerebrin is from three to five grains. Among the various intestinal antiseptics used may be mentioned salol, beta-naphthol, bismuth salicylate, guaicol carbonate, sodium salicylate and others; and as tonics strychnine, arsenic, the hypophosphites, phosphorus and iron are at all times of service. As a constructive, cotton seed oil has proven to be most beneficial. In conclusion, I might say that there is hardly a drug in the pharmacopœia; there is hardly a material in the vegetable or animal world that has not been used in the treatment of epilepsy, and that has not been lauded at one time or another.

Hydrotherapy—Hydrotherapy is an important aid in treat-

ment. Many epileptics are known to be suffering from an autotoxosis with an increased irritability of the nervous system and deficient circulatory capacity, and a vigorously active skin means a more perfect elimination of the toxins. In these cases, hydrotherapeutic measures have been used with most excellent results, but oftentimes the benefit noted is due to the relief of the bromide intoxication. Tepid baths at a temperature of 125 F., given twice a week, and a cold douche with average temperature of 75 F., daily, each to be followed by a brisk massage, are most beneficial. In institutions where special apparatus is installed, this treatment may be carried out more perfectly by the aid of hot air cabinets, douches, etc., but in the average home these treatments can be given by exercising a little ingenuity.

Surgical Treatment.

Those cases of epilepsy amenable to surgical treatment may be divided into two classes:

1. Cases which call for the relief of some periphreal irritation; as that of the nose, eyes, skin. mouth, ears and genital organs.

2. Cases in which surgical interference is directed to the nerve centers.

In the first class may be placed those cases which are thought to be due to a local irritation, such as adenoids, nasal polypi, eye-strain, phimosis, dental caries and abnormalities of the female genitatia. Many cases show an improvement after the removal of a nasal or a rectal polypi the correction of a reflected nasal septum or the use of suitable glasses for the correction of some refractive error. Carious teeth should be removed and improvement has been noted after the adjustment of suitable artificial means of mastication. All pathological conditions of the female genitative organs demanding surgical treatment should be attended to, irrespective of the epilepsy, for we have seen the results of the in-

discriminate removal of the ovaries and other generative organs for the so-called cure of epilepsy.

The confidence in the remedial value of brain surgery in epilepsy has diminished in recent years. Only a few years ago it was claimed that 50 per cent to 60 per cent of those cases trephined recovered; but to-day it is evident that a much smaller number—only 4 per cent or 5 per cent—show any marked improvement. The earlier observers were misled by the fact that the great number of epileptics improve after any surgical intervention, just as there is frequently a lessening in frequency or even a cessation of the seizures during and immediately following any acute illness. The subsequent history of the greater number of these cases show that there is a return of the seizures. No case of epilepsy should be reported "recovered" until two years have elapsed since the last seizure, and it would probably be safe to give five years as the limit.

In the uncomplicated idopathic cases, no surgical treatment should be instituted, but in those cases with local symptoms, trephining with excision of the irritated portion of the brain is of benefit in a small number, and only when the operation is performed early.

In all cases of suspected traumatism, a most careful examination should be made. The nature of the injury, the character and mode of onset of the seizure, and the fact that traumatism may be only a coincidence must be considered. All cranial operations are best performed by the osteopathic flap method, and after exposure of the cortex, a tumor, if found, should be excised, a cyst removed or any damaged area cleared away. If the seizures have been focal or of a Jacksonian type excision of the motor center controlling the convulsive movements is called for. Drainage of the lateral ventricles has been recommended in idiopathic epilepsy, this being based upon the theory that epilepsy is due to an increased intracerebral pressure.

On the theory that the idopathic cases are due to an anæmia of the brain, excision of the cervical ganglia of sympathetic is recommended. The effect of this operation is similar to the effect of amyl nitrite. Jannesco first brought to the attention of the profession this operation, and in 1900 he reported nearly one hundred cases. Winter, after collecting two hundred and three cases, reported a recovery rate of 6.6 per cent.

TREATMENT OF LOBAR PNEUMONIA.

By C. G. Ferebee, M.D.,

Mr. President and Members of the North Carolina Medical Society:

The subject to which I wish to call your attention is: "The treatment of Lobar Pneumonia." As this is a subject on which volumes have been written with a great diversity of opinion among the medical profession, I wish it distinctly understood that it is not my intention to introduce anything new in the way of treatment, and I desire only to call your attention to the modification of some of the tried and true remedies that have given me almost universal satisfaction in the treatment of this, our most dreaded disease.

In order that I may more thoroughly explain this treatment I will report a recent case, with the treatment in detail.

April 25, 1907. I was called to Mr. T., age 45 years, sailor by occupation. This man, with the exception of two previous attacks of pneumonia, had been in excellent health all his life. On examination I found a typical case of lobar pneumonia, with a temperatue of 105 degrees, and all other symptoms accompanying same. After instructing the nurse in regard to the sanitary care of the patient, I ordered for nourishment 4 ounces of milk every (4) four hours, beef and chicken broth 4 ounces every (4) four hours, alternating with milk, cold water *ad libitum*.

I immediately applied a fly blister 4 by 4 inches over the right lung at the seat of an agonizing pain, and instructed the nurse to let same remain for about seven or eight hours, after which time to remove and apply a warm poultice.

I ordered as medicine calomel and soda, one grain of each every half hour until ten (10) grains had been taken, to be followed in two (2) hours by phosphate of soda, one tablespoonful every two (2) hours, until bowels acted freely, after

which he was to have strychnine 1-60 of a grain every four (4) hours, quinine sulphate 5 grains every four (4) hours, Beechwood creosote 5 minims in wine glass of milk every four (4) hours, quinine and strychnine alternating, creosote to be given with strychnine.

At my second visit, April 26, I found a temperature of 103, respiration 25, pulse 120. The blister had filled nicely, with perfect relief from pain. I dressed the blister and continued treatment as on previous day.

April 27. Tempature 102, pulse 100. Ordered two (2) lapactic pills at be given that night, and two (2) each night thereafter when bowels failed to act during twenty-four hours.

April 28. Practically no change from the day before.

April 29. I noticed the heart slightly weaker, ordered strychnine increased to 1-30 of a grain.

April 30. Pulse satisfactory, other symptoms the same as previous day.

May 1. Patient seemed to have some difficulty with expectoration. Ordered creosote increased to 10 minims with one ounce of whiskey every four (4) hours.

May 2. Tempature was not above 102, pulse 100, expectoration free and easy. Continued treatment as above.

May 3. I found patient with temperature 98, pulse 100, and expressed himself as feeling fine. At this visit I discontinued all treatment, except 1-30 grain of strychnine every four (4) hours. Liquid nourishment as before, with addition of soft boiled eggs, toast and rare beef.

On May 6, I discontinued all medicine, put patient on full diet, on which he made a complete recovery.

In conclusion I wish to respectfully call your attention to the use of both creosote and quinine in the treatment of pneumonia, but I wish it understood that the above treament is not a routine practice in all cases of pneumonia, but I do use the above mentioned drugs in all cases where there is no special idiosyncrasy. Other than the use of the drugs in

question keep all the excretory organs functionating properly, nourish our patient, and support his strength with such drugs and mechanical appliances as we consider the particular case demands.

I would like to say here that for our heart stimulants we depend mostly upon strychnine, nitrate and whiskey given to their full physiological effects should the occasion require.

Now, gentlemen, I have stated in the beginning of this paper, we do not intend this as an exhaustive treatise of pneumonia, but only a brief mention of a few remedies that have given us satisfactory results. We earnestly request, if there be another member present who has had any experience with the drugs above mentioned in the treatment of pneumonia, that he will now give same for the benefit of the members of this Society, and to any of us who have not had any experience with this line of treatment you can do me no greater favor than to give this paper a thorough practical discussion.

AN ETHICAL PHYSICIAN.

By Dr. J. T. Burrus, High Point, N. C.

In the great workshop of the world many tasks have to be performed exceedingly varied in their character and unlike in their requirements. Fortunately the workers too are likewise dissimlar in their aptitude, talents and tastes.

Men either from their birth seem destined for certain careers, or in their youth cultivate inclinations which become second nature. Thus men seek different vocations suited to their qualifications and for the most part correspondent with their desires.

Some adventurous spirits find their element only in the smoke and uproar of the battlefield; others, of a more peaceful nature, sigh for the green fields and contentment of a pastoral life. Some are ambitious for political preferment or aspire to become great orators. Others choose the unostentatious role and strive to accomplish things without "fuss and feathers."

Of all the vocations in life there is one, the full importance and seriousness of which is not adequately appreciated by the young men who are casting about for a career, it is that of a physician, "the healer of the sick." Let no one enter lightly upon this career, but first let him consider earnestly what the call of the physician implies. He should be made to know how exacting and responsible a vocation it is, and how very great will be his possibility of doing good or harm, according as he shall be a good physician or a poor one.

It is my purpose to set before you in a few words what I consider the qualifications of an ideal physician.

First of all he should be honest. By honest I do not mean simply that he must be just and honorable in his business transactions, but that he must be frank and candid in all relations of life and unwilling to countenance fraud at any time. He should be honest especially in his relations as a physician.

He should profess nothing that he does not know, and if he does know something demanded of him, let him not hesitate to frankly admit his ignorance. In this day of great accumulation of knowledge, it is not possible for the wisest to know everything that is to be known; besides there remains yet to be discovered far more than is already known, so there are many things that no one knows.

The real man of science understands the limitations of human knowledge. It is only the ignorant pretenders that claim to know everything. On the other hand, the physician ought to be ashamed to say "I don't know" when the question asked is one that any well educated, up-to-date physician could answer.

The practice of medicine in the present generation requires much preparation, sacrifice and study. We have long ago abandon the superstitution which formerly existed with regard to disease and its remedy and medicine has been put on a scientific basis. This is a day of progress, enlightment and intellectual activity; that laboratories throughout the world are filled with earnest thinking men, delving into the secrets of nature, and every day bringing forth some new advents and improvements in the art of healing. The physician who will give his patients the benefit of the latest and best knowledge must keep abreast with the times. If he has a good foundation, it will be easy for him to appreciate the writings of other men and know to select what is good and avoid what is bad and faulty. Not only should the model physician read the journals, but he should attend his local and State medical societies and he should talk over medical subjects frequently with his brother practitioners and not to do this would simply mark him as an impostor in the field of medicine. If he lives far from the influence of the great medical centers, what could be better than every year to spend a month visiting the hospitals and clinics which are afforded by our larger cities, in order to pick up new ideas and gather new methods in practice?

The physician should not only be as learned as possible in his profession, but he ought to be in all respects a model man. He ought to be broad, well rounded and an accomplished man. H ought to have a good knowledge of both books and men. He comes in contact with all classes of men and he should be able to make himself an acceptable companion to every one. He should take great care not to be narrow in his views; especially he ought to be generous and open-hearted with his fellow practitioners, free from jealousies and petty spites, and willing, if occasion demands, to make the "amende honorable." There will be times, no doubt, when his actions will be misjudged, and there will be some to blame him as well as some who praise. If, however, he persists unflinchingly in the right course as he sees it, and if he has been as I have advised, always honest, sincere and straightforward, he will have nothing to fear in the occasional malice of some disgruntled patient. His noble record will give the lie to slander and he will have hundreds of admirers and friends to defend him, but above all things he will have the consciousness of having done right, which is even better, for

> "Good actions crown themselves with lasting days,
> Who deserves well needs not another's praise."

The responsibilities of a physician's life are, as can be readily imagined, very great. He assumes the custody of the health and life of his patients. Whether or not he can do positive good may often be a question, but there can be no doubt that through ignorance, carelessness or neglect he may work untold injury upon the health of those under his care. He must, therefore, be ever watchful to prevent the spread of disease, and ever diligent to warn his patients and the general public against disease producing agents. He must hold himself in constant readiness to respond to emergencies, for often a minute's delay may mean the death of a fellow being, (from hemmorrhage for example), when more timely aid might have saved.

The spirit of the guild, as it has prevailed from time immemorial, requires us, as true physicians, to give our service without stint to rich and poor alike, and to make the relief of human suffering the one prime motive of our lives.

The physician who leads a model life is a great power for good in the community by virtue of his example. Who can not remember, as a child, some kind-faced old doctor in our neighborhood whom we respected and reverenced next to our own father? Let no one, therefore, who holds that position of honor, shadow, by his own misdoing, the good opinion of his admirers. The physician then should be a pure man, free from evil habits and immoral practices. He can not successfully preach the evil of the drink habit to others if he himself be a drunkard; and likewise any other bad habits, such as morphine and tobacco.

The physician, it must be remembered, gets nearer to the real heart of the people than it is possible for any one else. He sees people in their suffering and distress, when their inmost souls are often made more bare than at any other time. Family secrets, without his asking, are thrust upon him, and sins, sorrows and sufferings, hidden from the world, may be well known to him. Let him be worthy of the charge, and turn to good every opportunity that presents itself, and by his sympathetic manner and his cheering words, he may bring comfort and hope to many disconsolate souls. He may be able to say a word to a wayward son or an erring daughter that may have more force than a whole book full of sermons. His whole power for good, therefore, is not alone in his ability to administer to the bodily ailments of mankind, but in a thousand ways he may, working quietly without ostentation, in his own sphere, contribute a great deal to the general betterment of his fellow men.

"Press vainly onward, not in vain,
Your generous trust in humankind;
The good which bloodshed could not gain,
Your peaceful zeal shall find."

ARSENIOUS POISON.

By J. W. Ring, M.D., Elkin, N. C.

Arsenic is a metallic element of very common occurrence, being found in combination with many of the metals in a variety of minerals. It forms alloys with most of the metals. Combined with sulphur it forms two compounds, orpiment and realgar, which are the yellow and red sulphides of arsenic. Orpiment is the true arsenicum of the ancients, with oxygen it forms two compounds, the most important of which is arsenious oxide or trioxide, which is the white arsenic of commerce. It is used as a flux for glass and also for forming pigments. The arsenite of copper (scheels green) and a double arsenite and acetate of copper (emerald green) are largely used by painters. They are also used to color paper hangings for rooms, a practice not unaccompanied with considerable danger, especially if flock papers are used or if the rooms are closed ones. Arsenic has been too frequently used to give that bright green often seen in colored confectionery and to produce a green dye for articles of dress and artificial flowers. Also arsenic is found in large quantities in a great many of the mineral waters.

Arsenical poisoning is a noxious consequence of the absorption by the human system of the drug in some form.

Although arsenic is classed as a metallic irritant poison, its action is by no means limited to that of an irritant. It acts specifically on the gastro intestinal mucus membranes, whatever be the channel of entrance to the system. The most frequent source of acute arsenical poisoning is the administration of the white arsenic or arsenious acid, but the sulphides, various arsenites, and impure dyes, wall papers and pigments, paris green, rat and roach poisons may be sources of arsenical poisoning.

Acute arsenical poisoning is the usual form of poisoning

resulting from the nefarious administration of any preparation of arsenic, but usually arsenious acid is employed. I do not know of any poison which is so universally employed by the criminal who has a true or imaginary grievance to settle. I do not know what the statistics would show, but certainly a greater number of cases of poisoning from arsenic than all other poisons combined. In a very short time after the arsenic has been introduced the symptoms come on. The quantity and its state as regards to solubility also have an obvious relation to the appearance of the symptoms. Most commonly after a sense of faintness and depression intense burning pain is felt in the epigastro region accompanied by tenderness on pressure; nausea and vomiting quickly supervene, increased by every act of swallowing, an alkaline mineral taste with a great deal of ptyalism. The burning pain in stomach is more like it was filled with coals of fire. The acute burning pain is so excruciating that the person feels that dissolution is near at hand. Unlike an ordinary bilious attack the pain and nausea are not relieved by vomiting and the burning only temporarily. The vomiting is ordinarily followed by violent purging, the excrement being often streaked with blood. The diarrhœal discharge are preceded and accompanied with the most violent cramps of the whole abdominal walls, stomach and intestines with a great deal of tenessmus of lower bowel. Other prominent symptoms are great thirst, feeble, irregular pulse and cold clammy skin, and if the patient is not relieved usually dies within eighteen hours in a state of collapse, but tetanic convulsions are not uncommon and even chorea and paralysis may close the scene.

Chronic arsenical poisoning is general accidental but may be caused by being administered with criminal intent. When there is a persistent determination to cause the death of some one and they fail in their first attempt, but persist in their efforts, the symptoms of this form are a repetition of all the acute; and when a person has received several portions in

poisonous doses, they suffer from a peculiar nervous condition, as extreme muscular weakness, hyperæsthesia of the whole cutaneous surface; and if there has been much arsenic absorbed, the increased sensitiveness of the skin is so exaggerated that the least irritation causes intense suffering. Cold air coming in contact with the surface of the body causes a sensation of freezing. A fly crawling over the surface feels as though there were thousands of them. Scratching with finger nails produces a sensation of thousands of knives cutting the skin. The hyperæsthesia precedes the muscular weakness and continues for two or three weeks when it begins to subside and the patient observes a weakness coming on in the joints; first in the knees which gradually increases from day to day until the patient will fall in walking, then he finds a cane useful, but in a few more days he is compelled to resort to crutches and very soon the patient will have to be assisted by his friends, after which he becomes helpless.

While the weakness gradually increases the patient suffers from the most intense burning sensation of the skin of hands and feet, also a sensation as though the skin of his hands and feet would burst open, which feeling may continue for weeks or even months. As the muscular weakness progresses the hyperæsthesia gradually decreases but paralysis of sensation gradually comes on, also of motion. The loss of motion and sensation is slow and progressive and sensation may be completely destroyed that so far as feet and hands there is no sensation left. This condition is accompanied with deep seated pains as if located in the bones of the extremities, and a sensation as if electrical shocks were passing through the whole nervous system. It may be that nature is making an effort to transmit nerve force through the nerves. These shocks apparently pass even through the heart, and while the paralysis is well nigh complete, there is a choreic condition which is under the control of the mind, for if the eye

is removed from the hand while grasping any substance, the hand will by a spasm of the muscles cast it away. A patient may eat with a fork if the eye and mind is kept on the hand, but as soon as diverted therefrom the fork is cast away by violent spasmodic contractions of the muscles of the fingers. The loss of motion is rarely ever complete unless death takes place. Also the patient suffers from the most violent cramps in the muscles of legs and sometimes in fingers, especially if he occupies his back while recumbent, and they are so violent that his sleep is constantly disturbed. Cramps may come on in the muscles of thighs even while standing and are a source of a great deal of suffering. The loss of sensation gradually returns but may be delayed for months When motion and sensation begin to be established, hyperæsthesia gradually returns in those extreme cases of arsenical poisoning when the patient is so fortunate as to live. The anatomical lesions frequently are entirely absent, for instance when death takes place early. If patient lives a few days the appearance, however, in the generality of cases are the following: the mouth, stomach and intestines are inflamed, the stomach and duodenum exhibit spots resembling eschars, and perforations of all their coats and the villoms coat of the former is in a manner destroyed and reduced to the consistence of a reddish brown pulp. It is a general character of this poison to induce inflammation of the stomach in almost all instances, provided death does not take place immediately, whatever be the part to which it is applied. Thus the poison applied to a fresh wound may give rise to the same morbid appearance in the stomach and intestines as when it is swallowed. In some cases of arsenical poisoning the rectum is much inflamed while the colon and small intestines escape. The treatment of arsenical poisoning should be to empty the stomach as speedily as possible, using emetics of zinc sulphate, copper sulphate or the stomach pump. The chemical antidote is hydrated sesqui chloride of iron in large and often

repeated doses, demulcent drinks, flour and water, eggs and water, eggs and milk, also ice and iced water, iced milk. Hot water bottles to the extremities are frequently necessary. For the nausea, vomiting, intense thirst and burning pain in epigastrum, let patient swallow lumps of ice as often as he desires. Ice gives more relief than all other remedies combined. Buttermilk is very refreshing and also does a great deal towards relieving the intense burning after receiving a poisonous dose of arsenic in the system. If the patient does not die from the violence of the shock, the bowels should be kept freely open, the kidneys encouraged to perform their functions freely by a fluid diet, and there is nothing so refreshing and acts so well as large draughts of iced buttermilk, milk and egg punch. Iodide of potassium may be administered to aid in the elimination of the arsenic which in the chronic form is deposited in all the tissues of the body. In chronic arsenical poisoning where paralysis and other chronic conditions exist; to palliate the excruciating pains and aid the skin to help eliminate the poison, the hot Turkish baths will be found serviceable, and to them to add large quantities of chloride sodium will increase their efficacy. For the relief of the intense burning of the skin and deep seated pains of the extremities wrap them in heavy woolen cloths and pour hot water over them as hot as can be tolerated, and you will be surprised how hot they can bear it and how much relief a patient will receive by hot water used by this method, the patient frequently falling into a refreshing sleep which may continue undisturbed for hours.

Galvanism, as strong a current as he can bear, increasing strength of current from day to day, will be found serviceable. Faradisation with a metal brush every day will do a great deal towards restoring sensation to the extremities. Friction and massage should be used every day. Massage is the only thing you can do to relieve the terrible cramps. Forced exercise is the most important part of the treatment.

Insist on your patient being in the open air. Force him to walk even if it is necessary for nurses to support him on both sides and if he can walk only a few yards. Insist on this several times daily. Have patient to take drives several miles twice daily and keep him out of the house. It seems cruel to force a patient to walk when he has to be aided by crutch and nurse. His friends may criticise you but turn a deaf ear to all their appeals and whatever you do, rigidly enforce exercise, for nothing will aid you so much in restoring motion and preventing a degeneration of the muscles as exercise rigidly enforced, systematically carried out. Strychnine should be administered in as large doses as the system will tolerate and you will be surprised how much of the remedy a patient can take without producing any physiological effect. One twentieth of a grain of the alkaloid or even the fifteenth or you may give thirty, forty or even sixty drops of tr. nux vomica three times a day for weeks or even months without causing any ill effect and very little of the ordinary effect of the drug. But with any and all treatment the effects on the human system of arsenical poisoning may not be entirely eradicated, but leaves a lesion in the nervous system in the form of neuritis, the person going through life being continually reminded of his misfortune and causing a weakened constitution so the system has less resisting power, causing it to be more susceptible to the germs of other diseases which may attack the subject and cause premature death.

CONSERVATIVE PROSTATECTOMY.

By A. J. Crowell, M.D., Charlotte, N. C.,
Professor Genito-Urinary and Rectal Diseases in the North Carolina Medical College; Visiting Surgeon to the Presbyterian Hospital, Charlotte, N. C.

While there is a great deal of discussion going on both in this country and abroad as to the preferable and more scientific operative procedure for the relief of prostatic obstruction, it might be well to mention briefly a few vital points that make the perineal route more preferable to any other. Until within a year a go I had done only the perineal operation, but after hearing such men as Dever, of Philadelphia; Bryan, of Richmond; Messrs. Frayer, Pardoe, and Walker, of London, advocating the suprapubic route and reporting such brilliant results I decided to give this plan a trial. At first, the results were very gratifying, but finally lost a case from hemorrhage which occured while the patient was being moved from the operating room to his bed, continuous irrigation having been discontinued during this time. Soon after the patient was returned to his room, it was found that the bladder was distended with blood, making it impossible to re-establish continuous irrigation. The wound was at once opened, clots removed and the bladder flushed with hot normal salt solution. Failing to control the hemorrhage in this way, the bladder was packed with gauze which controlled the hemorrage, but the patient, a very feeble man of 76, died of shock with in six or eight hours. After this experience and remembering a similar one seen at St. Peter's Hospital, London, and having had no such experience by the perineal route, this plan of operation was at once abandoned.

When the location of the gland is considered, one can readily see that such an operative procedure is unsurgical and unscientific. As you are aware, it surrounds the urethra just anterior to the vesicle sphincter and is composed of three lobes, a medium and two lateral, covered only by the bladder wall

above. It is placed in the pelvic cavity below the symphysis pubis posterior to the deep perineal fasca and its undersurface rests on the rectal wall to which it is attached by a dense areolar tissue. This location makes its accessibilty from the perineum somewhat difficult without a perfect knowledge of the anatomy of the perineum. This, and the somewhat vague knowledge of the proper technique of the operation and the want of proper instruments, have prevented its receiving the endorsement it so justly deserves. It is the author's purpose to present the operative procedure that makes the perineal route preferable.

As the operation is usually done, it is much easier to gouge the gland out through the bladder than through the perineum but after it is removed the trouble has just begun. Perfect drainage is almost an impossibility through the suprapubic route and thorough drainage of septic cavities is indispensable when best results are obtained. The genius of man has been brought into action in devising plans for draining the bladder through the suprapubic opening, but all have fallen short of that obtained through the most dependent point. As yet all plans devised cause irritation of the bladder and abdominal wall and keep up suppuration and prolong convalescence. In the first place, in this operation the lymphatic and blood vessels are left open for the absorption of bacteria which are likely to be carried to other parts of the body; second, it is necessary to tear up the bladder wall considerably and almost certainly destroy the vesicle sphincter and leave the patient as the mercy of the compressor urethræ muscle as a safeguard against incontinence of urine; third, it is almost impossible to save the ejaculatory duets; fourth, the danger of hemorrhage following this operation is far greater; fifth, and most important of all the length of time necessary to keep the patient on his back and subject him to the dangers of hypostatic pneumonia, sepsis, bed sores, epididymitis, etc., should he escape immediate death from shock or hemor-

rhage to say nothing of the unpleasantness to the patient of being constantly bathed in his own urine and the arduous task of changing dressing and bedding three or four times daily. The shock is certaintly greater in the suprapubic than the perineal route. In St. Peter's Hospital, London, where they do only the suprapubic operation, (and they do a great many, as their work is limited to genito-urinary surgery), the average length of time a patient remains in the hospital is about four weeks and a good part of this time is spent in bed. Zuckerchondal, of Vienna, does only the perineal operation. However, he makes only one incision into the capsule and removes the gland without regard to the ejaculatory ducts. In this particular Dr. Young's operation, which enables one to save the ejaculatory ducts, is preferable for this reason: It is not uncommon to find cases of prostatic hypertrophy in young men with complete retention, and, is therefore important to preserves these ducts and thus save the man sexually. The operation is as follows:

The patient is placed in the exaggerated dorsal lithotomy position, the perineum being almost parellel with the floor. A No. 24 F. sound is placed in the urethra as a guide before the patient's limbs are flexed, as it is difficult to introduce afterwards. An inverted V-shaped incision is made through the skin, fat, and superficial fascia over the posterior part of the bulb backwards on each side of the rectum, stopping midway between the anus and ischial tuberosities. The handle of the schalpel is then used on each side of the central tendon to open up the space back of the bulb and in front of the levator ani muscles. This blunt dissection should be carried well down behind the triagular ligament on each side before severing any muscular structure. The bifid tractor is inserted and traction made which exposes the narrow band of central muscle and facilitates its division close to the bulb. Care should be taken not to puncture the bulb as this would cause hemorrhage. A tractor specially devised to lift the

bulb and triagular ligament up is inserted and by this means a better view is obtained of the recto-urethralis muscle, which lies behind the levator ani muscles and covers the membraneous urethra and apex of the prostate. This muscle is responsible for the acute anterior flexure of the rectum and holds it closely against the apex of the prostate. In order to reach the membraneous urethra it is necessary to divide it by transverse incision close up to the triangular ligament. The mebraneous urethra is exposed by blunt dissection. The bifid tractor is now removed and the posterior retractor is inserted to separate the levator ani muscles and displace the perineal body and rectal wall backwards. The membraneous urethra is opened and the edges caught with Holsted clamps. The prostatic tractor, with blades closed, is inserted into the bladder, then opened and fixed by tightening the thumb screw. The instrument is now ready for whatever traction may be necessary to bring the prostate well down into the wound. The lateral retractors are so placed that with the posterior one drawing the rectum backward, a complete exposure of the entire surface of the prostate is obtained. In order to avoid the ejaculatory ducts and separate the prostatic urethra from the gland two divergent incisions along the entire length of the posterior surface are made and carried well down on either side of the prostatic urethra. The next step is the separation of the capsule externally from the lateral lobes which is accomplished by a blunt dissector. It is most important to get well under all layers of the capsule in order to shell the gland out easily, otherwise, it will be extremely difficult. The internal enucleation, that is, the separation of the gland from the prostatic urethra, is next taken up. This is much more difficult and great care is necessary to avoid opening up the prostatic urethra. Firm adhesions to the lateral lobes of the capsule are frequently present and require division with scissors. When the enucleation of a lateral lobe has progressed fairly well on each side it is advantageous

to have traction made on the lobe itself with the forceps. The lobes usually come out in one piece. Most of the enucleation is done with the blunt dissector, but when the intra vesicle portion of the lateral lobes are reached it is usually better to separate the gland from the capsule with the finger to avoid tearing through the mucuous membrane covering it. The intra vesicle blades of the tractor can be distinctly palpated through the mucuous membrane with the finger and serves as a warning against tearing the bladder. It also enables one to palpate any portion of the lobe that may have been left behind after the lateral lobes have been removed. The prostatic tractor is next pushed backward into the bladder and rotated 90 degrees and then the median lobe engaged by one blade of the instrument and brought down into plain view. The index finger of the left hand is inserted into the right intracapsular cavity and the gland pushed to the left where the major part is removed after separation from the capsule and prostatic urethra, leaving only sufficient amount of the gland to avoid the ejaculatory ducts. A very large median intra vesicle lobe can readily be removed in this way therefore not considered more suitable for suprapubic prostatectomy. Occasionally one finds when the index finger of the left hand is inserted into the bladder it can be used to advantage in removing the middle lobe. After a thorough examiantion to be sure that all the gland is removed, the retractor is closed and removed, two catheters of fairly good size are then fastened together, inserted through the urethra into the bladder and tied by silk sutures to the skin at the upper angle of the wound. The lateral prostatic cavities are firmly packed with a small strip of gauze. A gloved finger should then be inserted into the rectum to search for lacerations. If a tear is found, carefully close with interrupted silk sutures, or at least two layers should be of silk and the third catgut. The levator ani muscles should be drawn together in their normal position in front of the rectum which guards against

sloughing of the rectal walls. The skin wound is now closed, leaving a small area in front for gauze and tube drainage. Continued irrigation with a hot normal salt solution is kept up until the water returns perfectly clear and then at short intervals for twenty-four hours. A submammary infusion of 1,000 cc. of salt solution is given while the patient is on the operating table which prevents shock, anuria and post-operative thirst. The gauze is removed on the day after the operation and no more packing put in. The tubes are pulled out a few hours later and the patient is usually placed on a wheel chair and carried out doors the next day. If this operation is carefully done, the only opening into the bladder is through the membraneous urethra, the patient generally controls his urine within three or four days and the perineal wound entirely closes in ten to fifteen days.

PRE-PERITONEAL SHORTENING OF THE ROUND LIGAMENTS—A NEW METHOD OF DEALING WITH RETRO-DEVIATIONS OF THE UTERUS —A PRELIMINARY REPORT.

By John Wesley Long, M.D., Greensboro, N. C.

No abdominal operation yet devised for retro-deviation of the uterus is entirely satisfactory. Those measures which seek to overcome the displacement by attaching the fundus to the abdominal wall, either by fixation or slight adhesions, are faulty mechanically, non-surgical in principle and often disastrous in results.

Surgeons who endeavor to hold up the fundus by shortening the uterine end of the round ligaments put out of actiou the strongest portion of the ligaments and double the strain on their weakest and most fragile portion, the pubic end.

Still another class of operations have for their special feature the looping of the ligaments at a point about an inch and a half from the cornua, drawing the loop against or through the abdominal fascia and stitching it there. The objections to this class of operations are several, (1) that they draw the peritoneum into an infundibulum, some even pulling it through the fascia and muscles of the abdominal wall; (2) a number of them necessitate sutures in the peritoneum; (3) all side-track as it were two-thirds of the ligaments; and (4) some of them make dangerous loops inside the abdominal cavity.

The trouble with ingenious surgical minds, when seeking to devise methods for overcoming retro-displacements is, I believe, that they fail to take into account the normal anatomical and physiological relations of the round ligaments.

The anatomical point to which I wish to call special attention in this connection is that as the round ligament passes outward to the pelvic wall to skirt along its side to the inguinal canal, just as it reaches the bony pelvis it passes

above and to the outer side of the hypogastric artery, around which it plays as a cord does over a pulley.

I first noticed this while doing pelvic work by the abdominal route. None of the older editions of the anatomies mention it, nor is this important fact referred to in any gynæcology published. However, I understand the last edition of Gray and Cunningham's Anatomies describe this long-over-looked relation.

After intra-uterine life, the hypogastric arteries, shrivel into fibrous cords which have far more resistance than did the arteries. This anatomical relation provides for an important physiological function. The "hypogastric pulley," as I have designated it, acts as a pivotal point, not fixed immovably, but sling-like in its adaptability, about which the round ligament plays as the uterus sways backward from a full bladder, forward from a distended sigmoid, upward when pregnant and downward when involuting.

Further, while trying to conceive of some procedure by which the objections inherent to all known methods might be overcome, three ideas fixed themeslves in my mind as being essential: First, the forward pull to the fundus should be through the medium of the natural guy-ropes, the round ligaments; second, the slack should be taken up in pubic end of the ligaments; and, third, the work done on the ligaments should be pre-peritoneal. The classical Alexander operation is ideal being based up on sound principles and should be employed in all instances where it is not necessary to open the abdomen; but here, we are dealing with a different proposition.

Before describing the operation which I purpose offering to the profession through the medium of this Association, I pause to say that it is asking too much of any method to expect the fundus to be held *in situ* without having due regard for all other pathological lesions that may be present. If, for instance, the perineum be torn or unduly relaxed it must be repaired, no matter what operation we employ to correct

the retro-deviation. If the cervix is torn or hypertrophied, it should be dealt with. By way of illustration, I recall the case of a maiden lady for whom I shortened the round ligaments by the Mayo method. She returned in a few months saying the prolapse was still present. I examined her digitally and found the uterus in good position except that the cervix pointed rather too far forward. But my assurance did not satisfy the patient, and she said if she "squatted down" the prolapse recurred. I then examined her while she was in the squatting position and found that by powerful muscular action she could force the cervix to the introitus. Further examination revealed the trouble to be a moderate degree of supra-vaginal hypertrophy. To overcome this the cervix was amputated high up, with entire relief. The apparent failure was due not to any fault of the operation but in not amputating the hypertrophied cervix. Many women with retro-deviation of the fundus have an unusually deep Douglas's cul-de-sac; and almost invariably, retroversion of long standing is accompanied by elongated utero-sacral ligaments. When either of these complications be present a reef should be taken in the overstretched utero-sacral ligaments.

The operation which I propose and have been doing for a number of months is briefly as follows. After repairing the lesions of the cervix and perineum, the abdomen is opened and all accessible organs carefully inspected and pathological conditions dealt with as may be demanded. The fundus is now gently lifted from its bed in the cul-de-sac and the end of a wet sponge placed beneath it. The round ligament upon one side is then caught with a pair of artery clamps an inch or two from the fundus. This forcep is merely a handle with which to tug on the ligament and assist in locating it preperitoneally as decribed in the next step.

Beginning at the side of the abdominal incision the peritoneum is stripped from the fascia trasversalis to the internal inguinal ring. By means of a blunt retractor the assistant now lifts the abdominal wall when a tug on the forceps

holding the round ligament quickly reveals to both touch and sight the pre-peritoneal portion of the ligament. The fore-finger or some blunt instrument is now carefully hooked over the ligament pre-peritoneally and the forceps on the abdominal portion taken off. Gentle traction on the ligament makes it taut and with a bit of gauze the peritoneal infundibulum is gently stripped inward, toward the fundus, leaving three or four inches of the ligament bare. The end of a curved forceps is now pushed through a narrow bit of the conjoined tendon on the under side. The end of the forceps is made to grasp the round ligament about midway its bared portion and pulled backward through the conjoined tendon. By means of a round needle a suture of linen or cat-gut is now passed through the ligament at the apex of its loop and then through the ligament close to the peritoneum, and the suture tied. This brings the loop snugy against the single strand of the ligament running from the peritoneal reflection to the perforation in the conjoined tendon. I usually put a second suture through all three strands of the ligament about midway. The other ligament is then treated in the same manner.

It can readily be seen that by this plan the outer fragile end of the ligament is made three-ply and when the peritoneum drops into place nothing can be seen of the work done since it is all pre-peritoneal. After the ligaments are shortened, the gauze is removed from behind the fundus and the abdominal incisions closed in the usual way.

It is too early yet to speak of the results of this operation, but so far as I am able to judge from the cases that I have treated by this method the results are most fratifying. Recently I had the opportunity of examining the first patient on whom I did this operation and I found uterus in a normal position. Assuredly it is based upon sound surgical principles and if properly executed should give excellent results.

My friend, Dr. J. Fulmer Bright, Professor of Anatomy in the Medical College of Virginia, kindly traced the relations of the round ligaments for me, and I wish to give due credit to him.

DISCUSSION.

Dr. Kelly: I naturally feel a deep interest in the subject of Dr. Long's paper, as in the year 1887 I published the first article which ever appeared in this country on suspension of the uterus. I called the operation at that time *hysterophrorrhaphy,* patterning the word after *nephrorraphy,* the term we use for suspension of the kidney. Since that day, this operation has run the gamut of an enormous number of changes. It is both curious and interesting to see how far the surgical mind has expressed its natural bent in modifying and improving operative procedures by changes so trivial, or else so more or less radical.

The first thing I should like to say to an audience of general practitioners about the treatment of retroflexions, is that the great majority of cases need no treatment whatever. The moderate retroflexions, or slight tiltings back of the uterus frequently, and the more extreme forms occasionally do no harm whatever, and require no treatment at all. No case of retroflexion should be submitted to an operation because of the displacement alone; only those cases require operation which excite definite symptoms, such as dysmenorrhœa, or, it may be, a sense of dragging and bearing down, pain in the back, and weakness. In young women, in particular I am very loathe to operate upon a retro-displacement, and if I were a general practitioner, I would not recommend such an operation without careful consultation with a cautious specialist.

In women who have borne children, the retroflexion is, as a rule, associated with some enlargement of the uterus, and with a breaking down of the vaginal outlet, which I call a relaxed vaginal outlet, not a perfectly satisfactory name, but better, I think, than laceration of the perineum, because that suggests a tear, when often there is no tear at all visible to the eye.

Now as to the best kind of an operation. My own opera

tion is that of suspension of the uterus by two silk sutures, by which the fundus hangs to the abdominal wall, just above the symphysis. These cause an effusion of plastic lymph which pulls out, and in time forms a suspensory band, which easily holds the uterus in anteposition (illustration upon the black board.) I had done this operation over 600 times, when I counted up all my cases a number of years ago. I have had the following accidents, however, which have made me turn to the Gilliam operation, or one of its modifications, in cases of women in the child-bearing period of life. One of my patients at the end of a pregnancy was reported to me as having had an obstruction of the bowels. I never got any further news of this case. In two other instances, the patient became pregnant with twins; in one of these cases, the uterus was not suspended, but fixed, because of a scar due to a myomectomy, done coincident with this suspension. This patient came into such excellent hands as those of R. L. Dickinson, and had the best care, but she died after a Cæsarean section, without any clearly assignable cause. In the other instance, after a confinement with twins, the patient had a great deal of bleeding, and being given chloroform in order that a tear might be sewn up, she died under the anæsthetic. In addition to these cases, there have been several in the hands of my associates, where there has been serious trouble with the labor, Cæsarean section has been necessary. These accidents are the only serious sequelæ I have had, and aside from them I have had a great number of cases that got through pregnancy in a natural manner.

In a case I recently saw with Dr. Hurdon, there was a transverse presentation, and the cervix was pulled up high over the promontory of the sacrum. On making a short incision in the abdomen, a strong, fleshy, suspensory band was seen, dragging the fundus downward and forward. On cutting this, the uterus went up step by step, until there was a perfect straightening, after which the wound was closed,

and in a few days the patient had a baby, after a perfectly normal labor. This was a far simpler and safer procedure than a Cæsarean section; I wish it had been tried oftener in similar cases.

The Gilliam operation suspends the uterus beautifully, by pulling the fundus straight forward with round ligaments. The modification suggested by Dr. Long appeals to me, and I propose to give it a fair trial.

REPLY TO DR. KELLY'S DISCUSSION.

Dr. Long: As Dr. Kelly is the guest of this occasion and the hour has arrived when he is to deliver his address to the Society, I shall be pleased to give way to my distinguished friend; therefore will take only a moment or two in replying to his discussion of my paper.

I will notice the points which Dr. Kelly made in somewhat reverse order. First he warns us that most women who have retro-deviations of the uterus do not need an operation. That is true, and the operation which I propose is not intended for the great multitude who do not need an operation, but for the "six hundred" who do need surgical interference.

Dr. Kelly says that he counted fifty-four methods of operating for retro-deviations and then turned the counting over to an assistant. The very multiplicty of the methods shows that no one meets the requirements of a perfect operation.

Dr. Kelly claims that the round ligaments do not hold the fundus forward. That is because Dr. Kelly has not given due consideration to the relations of the round ligaments especially as regards their relations to the hypo-gastric arteries. I have no doubt now since Dr. Kelly's attention has been called to the matter that he will have a picture in some of the numerous books he writes, illustrating the "hypogastric pulley." It may be noticed in passing that when Dr. Kelly wishes to hold the fundus forward he (latterly) shortens the round ligaments (Gilliam operation).

Dr. Kelly says he is now using the Gilliam operation or one of its modifications. Now the Gilliam operation simply loops the round ligaments to the anterior abdominal wall, thereby making three dangerous hernia loops where the Lord did not put any. I happen to know that Gilliam himself came very near abandoning his own operation. But faulty as the Gilliam operation is, it is infinitely better than the classical "suspensio uteri" operation, known as "hysterophrorraphy" or the "Kelly operation," and Dr. Kelly is to be congratulated on giving up the operation, especially in childbearing women. Dr. J. Whitbridge Williams, Dr. Kelly's own colleague, read a paper at the last meeting of the Southern Surgical and Gynecological Association on the subject of fastening the fundus to the anterior abdominal wall, and he condemned in unmeasured terms the Kelly operation.

Dr. Kelly speaks of my method of shortening the round ligaments as a "modification." He overlooks the fact that it is an entirely new operation, evolved along anatomico-physiological lines and based on sound surgical principles; and especially is it free from the objectionable feature of introducing a pathological lesion into the abdominal cavity as is done by the Kelly and Gilliam operations.

EDMUND STRUDWICK, SURGEON.

By Hubert Ashley Royster, A.B., M.D., Raleigh, N. C.

The most heroic figure so far recorded in the medical annals of North Carolina is Edmund Strudwick, of the county of Orange. His character, his work, his life and his death were each marked by courage of the supreme type. His was a masterful mind,—and with it there was a physical earnestness and a moral heroism scarcely to be surpassed. Edmund Strudwick was born in Orange County, North Carolina, on the 25th day of March, 1802, at Long Meadows, about five miles north of Hillsboro, the county seat. His lineage was ancient and long-established in the community, his father being an important political factor and distinguished for those qualities which afterward graced his son.

Doctor Strudwick received under the famous Bingham, the elder, what would now be called a high-school education, though he did not finish the prescribed course of instruction, "so impatient was he to begin the study of the science to which nature seemed especially to have called him, and which he pursued with undiminished ardor, literally, to the last moment of his conscious existence." What was lacking in a classical education he made up by native ability and assiduous reading.

His medical studies began under Dr. James Webb, who stood to him almost as a father and whose place in the hearts of his people Doctor Strudwick subsequently filled. He was graduated as a Doctor of Medicine at the University of Pennsylvania on April 8, 1824. As a classmate of Dr. John K. Mitchell (the father of S. Weir Mitchell) and, with him, an office student of the celebrated Dr. William Gibson, young Strudwick became imbued with the best medical thought of the time. He served for two years as Resident Physician in the Philadelphia Almshouse and Charity Hospital.

EDMUND STRUDWICK

REPRODUCED FROM AN OLD PORTRAIT

Equipped with clinical experience, fired with enthusiasm and running over with energy, Doctor Strudwick in 1826 returned to his native heath and began the practice of medicine in the town of Hillsboro. From the very beginning he achieved success, soon becoming the commanding officer of the profession in that region of country. Never was success more deservedly gained. Every attribute of his being contributed to the result, for not only was he blessed with a sound body and a warm heart, but he had a superior intellect.

Doctor Strudwick never affiliated with any medical organization except the North Carolina State Medical Society. Of this he was a charter member and the first president. The Soociety thus honored itself by launching forth under the name of a man who had already risen to an eminence in his profession rarely attained in those days. At its meeting in Raleigh he delivered a striking address, in which he urged education of the people to the necessity for autopsies. The following is a strong paragraph from this address: "Neither the apathy of friends, the cold neglect and deep injustice of legislation, nor pampered quackery and empiricism can stay its onward course. True medical science will, like the majestic oak, withstand the shock and storm of every opposition. It has been beautifully compared to a star, whose light, though now and then obscured by a passing cloud, will shine on forever and ever in the firmament of heaven." He took a lively interest in the work of the Society to his last years, though he practically never contributed to medical literature. The only case he ever wrote up was a death from ether by paralysis of the respiratory center. This paper was sent to his friend Dr. I. Minis Hayes, then editor of the *American Journal of the Medical Sciences,* but was either lost in transit or found its way to the waste basket,—at least, it was never accounted for. So that, the first and only case that this busy man ever recorded was one of which he had no special reason to boast—a death from an anæsthetic—but reported from a

sense of duty and honesty, and that one was never published.

The character of Doctor Strudwick's work was such as came to every country practitioner in his day. He was apothecary, physician, obstetrician, surgeon. And though he performed those duties as other men had performed them before him, there seemed to stand out in him something that was different—above and beyond the country doctor around him. It was the man behind the physician, the strong mental and moral force back of his activity.

Though Doctor Strudwick was a well-rounded medical man, his *forte* was surgery and, had he lived in this day and generation, his name would be at the top of those who exclusively practice that art. Indeed, it is not saying overmuch to assert that no one man to this time in our State has made so enviable a reputation in surgery. When we consider the conditions under which he lived and labored, his work and its results were little short of miraculous. His reputation was not merely local, but during the '40's and long afterwards, he was doing operations in Raleigh, Wilmington, Charlotte, Greensboro—all the principal cities of the State. Numerous patients were sent to him also, some of them from long distances. There was not a general hospital in the State then, but he cared for his cases somehow and always gave them faithful attention. No modern surgeon in North Carolina has ever attained to such individual eminence. Nor were his results less wonderful. He attempted not only the lesser cases, but also those of magnitude, and this fact gives greater color to the results. All kinds of surgery attracted him and he sought for it. Scores of operations for cataract were performed by him, according to the now obsolete needle method, without losing an eye. Once as he was driving homeward after a long trip in the country, he saw an old man trudging along, being led by a small boy at his side. Doctor Strudwick stopped, ascertained that the man had been blind for 12 years, made him get up into the carriage and took

him to his (the Doctor's) home. One eye was operated on first and the other the next week, sight being restored to each. This case, as did all other similar ones, interested Doctor Strudwick very greatly.

If there was any special operation for which Doctor Strudwick was famous, it was that of lithotomy. Certainly he was the leading lithotomist of his time in North Carolina. There is no record of the exact number he performed, but it was large and his mortality was low. More calculi undoubtedly occurred then and Doctor Strudwick lived in a section of the State where this affection abounded. His custom was always to do the lateral operation and to introduce no tube or other drainage unless there was hemorrhage. It is said that he did 28 consecutive lithotomies without a death. One case in particular has come down to us, a very large stone, wedged into the trigone and assuming its shape. On the posterior surface grooves had formed along which the urine trickled down from the urethral openings. After making the incision and finding that the calculus was too large to extract entire, Doctor Strudwick sent to the blacksmith's, secured his tongs and crushed it. Fortunately, the stone was of the soft phosphatic variety.

Many breast amputations were done by Doctor Strudwick. In all cases he cleaned out the axilla, thus anticipating most of the surgeons of a later period. His after-results were in some cases quite surprising and were uniformly better than was the rule in those days. Numerous operations for strangulated hernia were done by him, with a high percentage of recoveries.

He performed the operation for lacerated perineum several times, invariably using silver wire, but undertook no trachelorrhaphies. His practice was always to sew up a perineal tear immediately after confinement and his success in these recent cases was noteworthy. Another anticipation of modern methods was his habit of never employing applications to the

interior of the uterus, but of advocating and using intrauterine injections of salt solution.

The most important operation of Doctor Strudwick's career was one about which, unluckily, the record is meagre. It was, however, in 1842 that he successfully removed from a woman a large abdominal tumor weighing 36 pounds. The nature of the growth is not made clear; most likely it was an ovarian cyst, but there are also evidence to suggest that it may have been a pedunculated fibroid.

Doctor Strudwick was married in 1828, two years after beginning practice, to Ann Nash, whom he survived but two years. Their union was blessed by five children—two girls and three boys. The girls died in infancy. Of the sons, one (Frederick N.) was a well-known lawyer, having been Solicitor of the Fifth District before his death, and both the other two followed their father's profession. The youngest, Dr. Edmund Strudwick, Jr., became a practitioner of repute in Dayton, Alabama (where his son is now engaged in the drug business), and died at the age of 69 years. The eldest child, Dr. William Strudwick, is now living in Hillsboro, N. C., in the vigor of a ripe manhood and will apparently never grow old. He is just at the age which his father attained—77 years young—and embodies many of the traits which one feels were precious legacies from Edmund the Great. The present Doctor Strudwick is a fluent conversationalist, a most gracious host and withal a rare example of the fast-passing "doctor of the old school." May his shadow never grow less!

It now remains to say something of the personality of Edmund Strudwick and to call up incidents in his life which show what manner of man he was. That he was a hero—morally, mentally and physically—can be attested by his deeds as they stand. Doctor Strudwick was built in a big mould. His soul could not conceive, his mind could not think, his body could not do, a little thing. A study of his ca-

reer indicates that his ways were not the ways of the ordinary man, either in the medical profession or out of it. He was a master of men. And this was not an acquirement of age, but he was all his life a leader. His moral force in the community may be shown by his set determination never to allow doctors to quarrel. He simply would not let them alone until peace was made. A favorite way was to invite the warring ones to his home on a certain time without giving them an opportunity to know in advance that they were to meet. This done, he usually accomplished his purpose. He was determined even to the point of stubbornness. Just after the Civil War, his most influential friends attempted with all their power to persuade him to take advantage of the homestead law, which was designed to permit Southern men to save a little during the reconstruction pillage,—but he would not. Instead of this, he sold everything to pay his creditors and lived in a two-room house without comforts till he died.

In personal appearance Doctor Strudwick was attractive. His height was about 5 feet, 9 inches and he weighed 190 pounds for the greater part of his life. He was exceedingly active and actually up to his final hours his energy was comparable to that of a dynamo. There was about him an intensity that was of itself commanding and overpowering. Underneath this exterior of rough force was a suppressed tenderness that came from a humane and sympathetic heart and that, let forth, was as gentle as the outward manner was firm. The physician in that time was of necessity also the nurse. Here Doctor Strudwick showed his strength. Whenever he wished, for instance, a foot bath administered, he did not ask that it be done, but issued the orders, "Get things ready" and then, with a detail almost unheard of, impelled his untrained assistants to do his exact bidding. One of his special feats was what he called "lacing" a bed—making up an old-fashioned feather bed so as to render it a more comfortable resting place for his patient.

It was this sort of care that contributed largely to his successful work. He never neglected a case. No matter how insignificant, how poor the patient, how far the ride, he pursued it with the same zest. He never stopped for inclement weather, or swollen streams. He braved the former and swam the latter. Obstacles only seemed to increase his zeal to press onward.

His healthy body was a boon to Doctor Strudwick. Never but once in the working period of his existence was he sick. He had gone with his son to perform an operation. On the way out he complained slightly and, having finished the task, he became quite ill so that he had to be brought home lying down. He was nauseated, had a high fever ("calor mordax") and was delirious on reaching his room. It proved to be scarlet fever,—though there was not a case then known in the county, and, while he had been exposed to it many times, had never before contracted the disease. He was then about 50 years of age.

This fine condition of salubrity was aided also by his simple habits. He was not a big eater, and was extremely temperate. He never asked for a second portion of anything, but always took of each article what he thought was the proper amount for him to eat, finished it, and would have no more. An oft-repeated saying was, "I have never swallowed anything that I heard of afterwards." He also had the gift of taking "cat naps" at any time or place—a habit that William Pepper, the younger, did so much to celebrate. Doctor Strudwick usually slept in his chair. He was an early riser, his life long, the year 'round. And one of his invariable rules —which illustrates the sort of stuff of which he was made— was to smoke six pipefuls of tobacco every morning before breakfast. He was a most insatiate consumer of tobacco, being practically never free from its influence. What liberal contracts nature makes with some mortals!

In politics Doctor Strudwick was an ardent Whig, though

he never sought or held public office. His sense of humor was shown when, later in life, he remarked to his son: "I don't know what I am coming to. Just to think, I am wearing a slouch hat and a turned-down collar, and reading the *New York Herald.*"

In religion he professed the creed of the Presbyterians and was an elder in the church. His interest in life and its affairs was forever keen and live, particularly in any project for the public good. He was everybody's friend and an absolute paragon of cheerfulness. Even during his sudden reverse of fortune, his optimism never left him. But, while he was friendly and gentle, no one ever came down with more thundering tones upon those who were guilty of mean or unworthy acts.

Though his heart was chiefly in his surgery, yet Doctor Strudwick showed great fondness for every branch of the profession. He bought all instruments and books as they came out. All his spare time he spent in reading medical literature. He devoured knowledge voraciously and thoroughly digested it. His study of a subject was exhaustive. For a goodly part of his time he rode on horseback,—and he was a superb horseman. When he went in a vehicle, he used a surrey, with a boy in front, so that he could read along the road. Many hours a day did he spend thus, acquiring information which he was ready at a moment's notice to put to use. In a flap on the dashboard he kept a bag in which were stored a small library and a miniature instrument shop. And often he would return with his carriage full of cohosh, boneset, and other plants, indicating his familiarity with medical botany. He prepared a good deal of his own medicine in this way. One of his favorite preparations was the use of sheep sorrel ("sour grass") for lupus. The herb was inspissated in a pewter spoon by exposure to the air and sun, and the resultant mass applied to the ulcerated part. It is said to have been very efficacious. What reaction was produced and what substance was formed can not here be said.

The crowning incident in the history of this great man happened when he was near the age of sixty years. Neither in fiction nor in real life has there been an example of firmer devotion to duty or more daring fortitude. The glorious deeds of Willum MacClure exhibited nothing that can compare to this one achievement of Edmund Strudwick. He was called to a neighboring county to perform an operation. Leaving Hillsboro by rail at nine o'clock in the evening, he arrived at his station about midnight, and was met by the physician who had summoned him. Together they got immediately into a buggy, and set out for the patient's house, six miles in the country. "The night was dark and cold; the road was rough; the horse became frightened at some object, ran away, upset the buggy and threw the occupants out," stunning the country doctor (who, it was afterwards learned, was addicted to the opium habit), and breaking Doctor Strudwick's leg just above the ankle. As soon as he had sufficiently recovered himself, Doctor Strudwick called aloud, but no one answered, and he then crawled to the side of the road and sat with his back against a tree. In the meantime the other physician, who had somehow managed to get into the buggy again, drove to the patient's home, where for a time he could give no account of himself or his companion; but, coming out of his stupor, he faintly remembered the occurrence and at once dispatched a messenger to the scene of the accident. Doctor Strudwick was still leaning against the tree, calling now and then in hopes of making some one hear, when the doctor's buggy came up at sunrise. He got in, drove to the house, without waiting to have his leg put in a splint, and, sitting on the bed, operated upon his patient for strangulated hernia with a successful result. "Greater love hath no man than this."

What an inspiration in the life of such a man! Viewing it even from afar one can not help seeing the sublime soul that was back of it all. He would have been no uncommon man

in any age in any place. It is to his surgical skill that extraordinary tribute must be paid. Were he living to-day, Edmund Strudwick would be the surgical Samson of our State. Indeed, it is doubtful if any of us equal him in the work which he essayed to do. In these times of wide possibilities his fame as a specialist in surgery would rank high. Such estimates are not overdrawn, for Doctor Strudwick's position in his period was such as to admit of them—and more.

The going out of this great man's life was as tragic and unusual as his career had been brilliant and useful. In possession of his customary good health, at the age of seventy-seven, he succumbed to a fatal dose of atropine taken by mistake from drinking a glass of water in which the drug had been prepared for hypodermic employment in an emergency. An account says that "he was buried in the cemetery of the Presbyterian church at Hillsboro, the funeral being attended by almost the whole population of the town." But for the accident which terminated his life, Doctor Strudwick would by all reckonings have lived to an advanced old age and some of us might have been privileged to know him. Priceless heritage this—to have fellowship with those rare souls, that stand apart in passing generations; eternal inspiration ours—to contemplate the life and character of Edmund Strudwick and to hold him forever in our memories as the very finest model of those whose days are spent in

> "Battling with custom, prejudice, disease,
> As once the son of Zeus with Death and Hell."

ANATOMICAL TERMINOLOGY.

By Charles S. Mangum, M.D., Chapel Hill, N. C.

I have accepted this opportunity to present to the profession an account of the efforts which have been and are now being made by Anatomists to lighten one of the most unnecessary burdens laid upon the student of medicine and that at the very threshold of his career.

To the practitioner who has seen service, Anatomy soon comes to consist of an accurate knowledge only of those things which enter into his individual work or his specialty. All the rest he cheerfully relegates to the past, among the many things he used to know. But to the medical student of the first and second year, descriptive Anatomy is an exceedingly serious thing, and often a gruesome burden. He tackles it with all the pluck and enthusiasm which the beginning of one's life-work is wont to instill, only to be met and often discouraged by a veritable deluge of names, many of them without meaning or consequence, and very often he fails utterly to appreciate the fundamental facts of structure, arrangement, relation and development of organs because of the enormous effort of memory required to master the mere terminology. Hence, what should be of the most vital interest becomes a dull routine and under such conditions an abiding knowledge of any subject is only a little less than an impossibility. Just here is where we may look for one of the reasons why so many men, failing to see the beauty of the science, representing as it does the very acme of fulfillment of all of nature's wonderful processes of development, look upon Anatomy as a sort of necessary evil with which they must be credited with all possible dispatch that it may be laid aside for other things more in keeping with their intellectual attainments and desires.

The excessive number of names with which the Science of

Anatomy is burdened is a perfectly natural consequence of its great age and its mode of development. Through all the centuries since the days of Vesalius, the "Father of Anatomy," and his, the first treatise on "The Structure of the Human Body," many men in many lands have been engaged in diligent research in this important field. Almost every civilized nation may lay claim to one or more of the great men whose lives and works are identified with the development of this fundamental subject, the corner-stone of medical science. These investigators, widely separated and working independently, gave names as they saw fit to the parts they studied, and as one investigator was often ignorant of the work done by others, the same parts were frequently christened with different names. The authors of text-books gradually collected these terms, selecting or rejecting names, or adding new ones with total disregard to what others might say or do.

Hence, it has come about that we have inherited from previous centuries an excess of anatomical terms, and the burden carried by text-book, teacher and pupil has grown progressively heavier until, at the present time, a condition approaching chaos has resulted. Many single structures carry double or even multiple names. The same structure is known by different names in different countries, or even in different medical schools, and sometimes two widely different structures will possess the same name. Lieberkuhn's glands in Germany are Galeati's in Italy and the intestinal glands, or all three, in America. The Pneumo-gastric nerve is also the Vagus, as well as the 10th Cranial nerve; the ciliary ganglion is also the ophthalmic and the lenticular; the valvular coli may with equal propriety be addressed as the valvula ileoccecalis, the valvula Bauhini, the valvula Tulpii, or the valvula Fallopii. So it goes without end and how may the student be expected to choose?

The need of reform and revision is obvious and this led

to the adoption in 1895 by the Anatomical Society at Basle of a list of some 4,500 terms as the most suitable designations for the various parts of the human anatomy which are visible to the naked eye. This list is known as the "Basle Anatomical Nomenclature," or the *B N A* as it is commonly called. Almost any one of the larger text-books of gross Anatomy contains as many as 10,000 names, and if the terms contained in all of the standard texts be collected into one list, they would number over 30,000. To reduce this cumbersome list to one of less than 5,000 names was a task requiring patience, skill and untiring labor. The terms are all in correct Latin and were chosen by a special Commission, made up of a group of the most distinguished Anatomists in the world, working six years at the task of selecting the shortest and simplest available names for the different structures. As a rule, one name is given to each structure and the great mass of synonyms is thus swept away. Very few of the terms are new, the object being not to create a new nomenclature, but only to relieve the present terminology from its inequalities, contradictions and obscurities, thus simplifying the task of both teacher and pupil. Latin terms were chosen in order to give to the nomenclature an international character, permitting each teacher or investigator to translate them fittingly into his own language. Certain definite principles were adhered to where they did not conflict with the wisdom of selection. These were:

1. Each part shall have only one name.
2. Each term shall be in Latin and be philologically correct.
3. Each term shall be as short and simple as possible.
4. Related terms shall, as far as possible, be similar.
5. Adjectives, in general, shall be arranged as opposites.

These general principles were disregarded in the case of all terms sanctioned by long clinical usage, as the mitral valve as a synonym for the bicuspid, and in the case of the anatomical terms used in the medical specialties.

No effort is made to limit the terminology in the field of research or of clinical medicine. It is the beginner who needs help, and he who has intrusted to him the duty of instilling into the beginner the interest, enthusiasm and love for his profession which will make the investigation of its wonders a labor of love instead of a cold business proposition. The art of covering ignorance of principles with a blanket of words, a thing so common with little minds, is something that we should teach the student of medicine to shun and not drive him to cultivate.

As usually occurs with all things new, the purpose of which is to reform old and established usages, the B N A has met with some adverse criticism from those who do not understand its nature and object.

There is something to be said for the claim that the personal names, which so thickly strew the pages of the text books of Anatomy, have a historical value and encourage the student to become familiar with the lives and works of famous anatomists. This may be true in a certain sense, but it would be interesting to know how many of the men of our generation, who, in the dissecting room, clinic or private practice, have handled and talked of Poupart's ligament, have ever connected the structure with the personality of the old French surgeon and anatomist of the 17th century, or have been induced thereby to look up his forgotten history.

Besides, historical injustice is of frequent occurrence in the naming of anatomical structures, the original discoverer being often ignored and the credit given to men who have succeeded them by many years. Many of the names are of men of little consequence or reputation, while Versalius, the pioneer and renowned teacher, has to his credit one very small foramen in the sphenoid bone, which is not even always present, and the name of William Harvey does not appear at all. Surely history which misleads should be condemned. Here, as elsewhere, the Commission acted wisely in retain-

ing those personal names sanctioned by long service and usage.

The B N A. has met with immediate and wide favor in the United States, having been adopted by many of the best schools. The medical specialists have agreed to accept it so far as it applies in their respective fields. It appears in most of the recent publications dealing with anatomical subjects, including the new edition of Morris's Text-Book of Human Anatomy, now in press. It is a pleasure to note that one of the first books in which it was used in this country was the "Anatomy of the Brain," published in 1900, by Dr. Richard H. Whitehead, then Dean and Professor of Anatomy and Pathology at the University of North Carolina. Dr. Lewellys F. Barker, of Johns Hopkins University, has recently published a little book in which he tabulates and arranges the Latin terms together with the English translations. The book contains also a most interesting historical account, which has made the preparation of this little sketch a very simple task.

It is safe to predict that as the new editions of the standard text-books appear the revised nomenclature will grow in popularity and we may expect soon to see it in general use in our medical schools, making lighter the task of the student and teacher and freeing the science of Anatomy from a cumbersome handicap to its growth. It only remains for examining boards to see the common sense of the reform and endorse the B N A and the wished-for relief will be assured. Descriptive Anatomy does not deserve to be called a dry subject. It will reward with much that is alive and interesting the man who approaches it with understanding, and any movement that gives promise of helping the teacher to bring the student to see it in its true light, should be heartily welcomed and should receive the unqualified endorsement of the medical profession.

FAUCIAL TONSIL OPERATIONS—AN IMPROVED SNARE.

By K. P. Battle, Jr., A.B., M.D., Raleigh, N. C.

In the removal of the faucial tonsils we have a subject of practical interest to the general prectitioner and specialist alike.

Without going into a detailed discussion of the indications for operation, which would make this a long paper instead of a short one, I propose to state the conclusions to which I have arrived as to when the operation is called for and then to deseribe those methods of operating which study of the work of others and personal experience have taught me to consider the best.

In regard to indications, then I would say, in the first place, that I do not think, as some seem to do, that all tonsils should be removed; nor do I think, as some actually do, that all enlarged tonsils should be removed. The mere fact that a tonsil is hypertrophied, regardless of the age or condition of the patient, is not sufficient. If there are no symptoms attributable to the enlarged gland it had best be let alone, and especially so in adults. Many times we can entertain no doubt as to the proper course, but often a careful judgment is called for, when each case must be decided on its own merits. As in every case not of a trivial nature we weigh on the one hand the mental and physical suffering of the ordeal and the risk, small though it be, but still the risk. On the other hand, we consider the harm to be feared if we do nothing, and the benefit to be expected if we act.

Tonsils need operation as a rule:

(1) When there is a history of repeated attacks of tonsilitis of whatever kind.

(2) When there is a mechanical obstruction, interfering with voice production or proper nasal breathing, with or without adenoids.

(3) When in connection with their abnormal state there is cervical lymphatic glandular enlargement, if in any way chronic, for this is probably due to tonsillar infection, which may be tubercular. This rule holds good whether the neck glands are operated upon or not.

(4) When they may be charged with being the portals of other systemic infection.

(5) When, without being inflamed, they may be shown to be the cause of pain, possibly extending to the ear, of various ill defined and vaguely located feelings of discomfort, of periods of bad taste or foul breath, or of more or less chronic sore throat.

The tonsil to be attacked may be simply hypertrophied, bulging out into the lumen of the throat, with perhaps a distinct neck-like contriction at its base; it may be flat or irregular, protruding but slightly or not at all; it may be firmly adherent to the pillars; it may be partly covered and concealed by a distinct fold of mucous membrane, called the plica similunaris, which extends downward, inward and backward from the true edge of the anterior pillar; it may extend unusually far into the tissue beneath the pillars, or high up between them into the supra-tonsillar fossa; the crypts may be partly filled with retained, thickened and degenerated secretion, forming cheesy and harder, even stony, concretions, or soft purulent and ill smelling masses.

To meet the whole of this variety of conditions there is no simple or single procedure. But we must first know what we wish to do before deciding how to do it. An ex-president of the American Rhinological Association states that in four thousand tonsil operations he has completely enucleated in only two cases and they were accidental. Other writers advise that, whether by cautery dissection, knives, scissors or divers forms of cutting punch forceps, the entire gland should be excised till "every vestige" of lymphoid tissue is eradicated.

My opinion is that a middle course is the best. Whatever the function of the normal tonsil may be, when it is diseased

and its removal is decreed the less left behind the better, but it is also true that in most cases when the greater part of the gland is taken away the remainder gives no trouble, while in most conditions the more radical operations are more dangerous. The safety of the patient should be the first consideration.

In other words tonsilectomy should be the ideal aimed at, though in many cases we must be content with tonsilotomy.

Nor is tonsilotomy always available. Some adults, from fear of pain or hemorrhage, will not submit to any cutting operation and we must use the galvano-cautery point. The sittings may have to be many times repeated, but the tediousness of the treatments and the soreness resulting are readily borne. This is not a method of choice, but if properly used very good results may be obtained, both in the reduction of the size of the enlarged and protruding variety and in the destruction of the submerged and degenerated forms. With care we may expect to guard against the principal objection, which is the liability of the mouths of the partly destroyed crypts to become sealed and hold the retention products in the deeper parts to give trouble in the future.

Local anæsthesia is brought about for this purpose in the same manner as for others and will be described once for all. For convenience, I dissolve two of the well known one and one-eighth grain tablets of cocaine in 15 minims of water, making a 16 per cent solution. This is carefully and continuously applied for ten to fifteen minutes to every surface of the tonsil that can be reached, on a very small bit of cotton tightly wound on the bent end of an applicator. The swab must be so small that it can be insinuated into the crypts, as many of them as possible. Some of the mouths may be seen and others found by gentle manipulation. As soon as the cotton becomes covered with mucus it is pulled off and a fresh application made. This seems a small matter, but the cocainizing of a tonsil is one of those simple things that can not be

done well without care. The tendency is to make a swab which is too large and too loose; the crypts are not entered, the deadening effect is not what it should be and cocaine is swallowed by the patient or wasted. The 15 minims are more than sufficient, yet I have seen an operator soak up that much with two dips of a big swab. After fifteen minutes of application the patient is ready and is made to promise not to jump or pull away should it begin to pain, but to give a signal by raising the hand; the surgeon promising on his part to cut off the current the instant the signal is given. In a few minutes, if necessary, for freeing the cautery point which has adhered to the tissues, the current may be turned on again for a second, with the patient's permission, and the electrode then taken out. All this is understood beforehand and confidence having been inspired the burning may be repeated safely until the patient or operator decides that enough has been done for the time. When there is no reason for haste it is well to cauterize one side at a sitting, alternately. Besides the accidental touching of the healthy parts by the hot wire, it is necessary to avoid burning the faucial pillars, or too deeply into the tonsils, remembering that the sloughing area will be a trifle beyond the actual touch of the wire.

But for the great majority of cases some form of amputation is employed. For many years I used a sharp-edged tonsilotome, but after trying the Peters tonsil snare, I have had no use for a guillotine. I consider the Peters the best of the tonsil snares, yet I found one complaint to make of it. Occasionally, in dealing with a large tonsil, when the handles of the instrument were closed the loop of wire could not be drawn quite far enough into the tube to completely divide the tissues, so that there was some delay and it became necessary to use both hands to finish. A few years ago I remedied this defect by substituting for the old running sleeve, to which the wires are attached, a new one with notches into which a spring catch fits as the sleeve moves. With this device, if a

Battle's Modification of Peters' Tonsil Snare.

second motion becomes necessary, the sleeve and wire are held firmly and automatically in the new position and the operation is finished with the one hand and in the fraction of a second. The addition of a ring for the thumb is also an advantage. The screw and nut are discarded. The Peters instrument, so modified, is entirely satisfactory. It is very strong and never fails. The ease with which the toughest and thickest tissues are cut through gives great satisfaction. As compared with the guillotine it is less bulky, (as to the part entering the mouth), and therefore, easier to use, is little, *if any,* more painful, is followed by far less hemorrhage and is safer.

The question of local or general anesthesia is merely one of age and stolidity of temperament. Cocaine alone is best for adults and those who can behave like adults. Young children I perfer to put to sleep, not only those who are to have adenoids removed as well as tonsils, but in all cases. The choice of the general anæsthetic depends upon the amount of time we expect to consume in completing the operation. Chloroform we would often like to use, but must exclude, because it is held that so many deaths have occurred in children with enlarged lymph glands that it is contra-indicated.

In the case of the protruding tonsil with little or no adhesion to the pillars, when the operation is easy and soon done, I prefer the bromide of ethyl. It may be given, a dram or two, in an ordinary ether cone with little or no air—the cone being removed when relaxation occurs. Given in this way the effect is rapid and excellent and the recovery prompt, while the evidence seems to place it next to nitrous oxide in safety.

In cases requiring dissection, especially when the removal of adenoids is to follow, the unconsciousness from the bromide of ethyl is too short and too suddenly lost and for these I use nitrous oxide followed by ether. The method is safe, the patient passes rapidly and agreeably under thier influence and there is no need for hurry.

Two or three minutes before the patient is ready I make an application of a 1-1,000 solution of adrenalin—not to the crypts, but to the surface just around the tonsil, to make easier the preliminary work. The first object in view is to free the tonsil from attachment to the tissues surrounding it, as much as may be needed and within the limits of safety. And in most cases *this is the most important part of the whole operation,* for just in proportion to the care given to it and the time taken in it will the result be satisfactory. Special attention should be paid to dividing the adhesions, if any, to the anterior pillars, and also to loosening the upper part in the supra-tonsillar fossa, for it is here that the diseased crypts are most apt to give trouble. Blunt hooks, scissors, and half sharp knives, curved on the flat, are used.

We are now ready for the snare, which has been previously mounted with number seven piano wire. It is more convenient, but not necessary to have two instruments, one for each side. We take one of them in the right hand and apply its grooved ring, carrying the loop around the left tonsil. A many-toothed curved forceps in the left hand is made to grasp the tonsil firmly and lift it from its bed. At the same time the right hand presses the ring outward in the effort to make the wire take hold as far as may be towards the other edge of the gland, the handles are quickly and strongly closed and the work is done. The forceps have not released the tonsil and now lift it out of the mouth. For the right tonsil, the snare is held in the left hand and the forceps in the right.

If the patient is under a general anesthetic, a gag is used, but a tongue depressor is not necessary except in the preparatory work.

The bleeding may be expected to stop of its own accord in a very short time. If it should prove obstinate, I would give a quieting hypodermic of morphine and rely upon the combined effect of pressure and adrenalin, a thick wad of cotton or gauze, wet with a 1-1,000 solution, held firmly against

the bleeding point until it stops. If this is not successful in a few minutes, I would make the same kind of pressure continuous by the use of the Stoerck-Miculicz tonsil hemostat.

Most instances of troublesome hemorrhage have been reported in hemophiliacs and the history of the patient and that of his family should be invariably inquired into before operating.

A mild antiseptic spray may be used as after treatment, but none at all is necessary.

LIQUOR SODII SILICATIS AND SOME OF ITS SURGICAL USES.

By William Moncure, M.D., Raleigh, N. C.

In the U. S. P. we find liquor sodii silicatis and liquor potassii silicatis, and my remarks on the soda salt are equally applicable to the potash salt. Sodium silicate appears on the market in the form of a dry powder, the U. S. P. liquor and various commercial grades.

The best results are to be obtained from the U. S. P. liquor, which is of a thick syrupy consistency and almost clear, while the commercial grades are more opaque. On account of the large amount of soda it contains and its strong alkaline reaction, dressings of this material should not ordinarily be applied directly to the unprotected skin surface. Under exceptional circumstances this may be done, and I have in mind a recent case in which silicate bandage remained in contact with skin surface for eight hours without producing the slightest irritation. The principle in surgery of always protecting by some elastic material the part from pressure and the danger of obstructing the circulation must be strongly emphasized in the case of silica as well as in that of other materials which become hard and unyielding.

Previous to the introduction of gypsum into surgery silica was extensively used to obtain a fixed dressing, but met with general dissatisfaction. When gypsum, or more properly speaking, plaster of paris bandages, became common knowledge, its use became general to the exclusion of all other materials so that one seldom finds a silicate dressing now in practice. Even in text-books on surgery mention of sodium-silicate is conspicuous through its absence. The work of Dr. Lewis A. Sayre, the father of orthopædic surgery in this country, seems in a large measure to have been responsible for the widespread adoption of plaster as the one material for

permanent dressings. And now the question naturally arises: are we justified in totally abandoning silica as an undesirable, unsatisfactory and useless surgical dressing? In answer, I may state that the object of this paper is to show that, with study and attention to a few details in the manipulation of silica, we can construct for many cases a more desirable fixed dressing than can be had from plaster. I do not mean that silica is superior in all cases, and I recognize the fact that, for some, plaster has no substitute, as instanced in the correction of club-foot, bow-legs, knock-knees and many other operations that require the dressing to become fixed before the patient leaves the table, and in some stages of potto disease.

There is no excuse for failure with plaster when we have the very best grade dental plaster, crinoline, with just the right amount of its sizing removed with water and subsequently dried and the bandages made fresh for each occasion; but, unless these precautions are observed, there will always be failures and disappointments at the most inconvenient times. *Commercial* plaster is worthless for surgical purposes. The plaster bandages, as sold in the supposedly sealed cans, will at best only make heavy and uncomfortable casts if they do not fail entirely.

Sodium-silicate has a distinct advantage here, in that the bandages—once made and put aside in glass jars—may be kept indefinitely without deteriorating in the slightest, being as useful a year or two hence as they are when freshly made. Silicate bandages, once made, are always ready for use in an emergency, without the loss of time consumed in finding the best dental plaster, crinoline and the making of the bandages. Plaster, as dispensed at present in cans poorly sealed with adhesive strip, will always deteriorate by taking up moisture, while silica is practically unaffected. Water renders plaster useless and silica can have its water increased or decreased as necessary, without undergoing chemical

change. The short time it takes the best grades of dental plaster to set necessarily causes a sacrifice of accuracy in its application. Silica hardens by evaporation and the greater length of time it takes to become fixed assures thoroughness and accuracy.

The length of time required for silica to dry is brought forward as a disadvantage and was the chief reason, in all probability, why it was discarded entirely. I believe this objection and difficulty can be overcome in the majority of cases.

As to the comparative weights of the two dressings the advantage is decidedly on the side of sodium-silicate.

Another and important feature of the silicate cast is its elasticity, so that, when cut, frequent removals and reapplications do not in the least disturb its shape or firmness. When a cast of silica, properly applied, is removed, there is no separation of its layers, any cracks or breaks and the cut surface remains solid. Plaster casts, when cut and removed separate into layers, break and in the majority of instances prove useless for further service. Should any uneveness or flaw occur in the silicate cast the addition of a little water to that part of the cast will soften it so that it may be molded to meet the defect and allowed to dry in the desired position. Plaster once set can not again be manipulated.

The property of the silicate dressing whereby it can be removed and reapplied as many times as desired for inspection and examination of the part confined, makes it more suitable than plaster for a large class of cases. The chief objection to the sodium-silicate dressing is the length of time it takes to harden, as it is a process of evaporation. There is always a way of overcoming this difficulty, and in my opinion, after the two dressings have become fixed in the position desired, the silicate is the one preferred. Let us take, for example, a case of fracture where the fragments may become disarranged while waiting a few hours for the cast to become thoroughly hard. The fragments are placed in apposition and retained by means of thin, narrow strips of card-board,

lightly padded and just strong enough to hold the bones in place. These coaptation splints are applied next to the primary roller of flannel and are to be removed when the cast becomes sufficiently dry to open. The various uses of silica are too numerous to go into detail with them all, therefore, I will only detail its application in the case of fracture of the leg and name other instances where it may be used to advantage.

It is not wise to place any fracture in a cast of unyielding material until the swelling has in a large measure subsided. In all cases there should be interposed between the cast and the limb, some elastic material. The fragments are placed in apposition and the limb covered with a flannel bandage. The position of the bones is now maintained by thin strips of card-board padded with a single layer of cotton. These coaptation splints, as many as necessary for each individual case, are held in place by circular strips of adhesive plaster and the remaining turns of the flannel bandage. A long, thin strip of flexible metal is placed over the anterior aspect of the limb to serve the double purpose of protecting the skin when the cast is cut and also to assist as a coaptation splint. To facilitate the ease of removal the metal strip is covered with wax paper and to prevent pressure necrosis it is bent over the patella and at the instep. The limb is now ready for the silicate bandages, and as the card-board splints and metal strip are capable of maintaining the fragments in apposition without fear of misplacement, an assistant holds the limb from the table while the bandages are applied. As there is no occasion to hurry, the bandages are applied deliberately and accurately, avoiding all reverses and wrinkles. I prefer to begin above the knee and work downward, using short figure of eight turns and keeping account of the number of layers. Each turn overlaps one-half of its predecessor. The last layer overlaps three-fourths of each preceding turn and is made entirely of circular turns. The bony points have been padded very slightly, if at all, and the layers of bandage are made to follow accurately the contour of the limb. In the ab-

sence of pain or other untoward symptoms the cast is not cut until the next or even third day. Following the metal strip as a guide, the cast is cut through for its full length.

There are as many cast-cutters on the market as the ingenuity of man has been able to invent, but none so good or serviceable as a strong, sharp pocket knife. A one-half inch strip is cut out directly from the front of the cast. With assistance the cast is easily sprung open and the limb removed. All uneven and rough edges are smoothed off and then faced with adhesive plaster. Two pieces of cotton cloth the length of the cast and four inches wide have a one inch hem. To this hem strong hooks are tightly sewn one inch apart. The two strips with the hooks are now covered with silicate solution and neatly applied to either side of the cut surface of the cast, so that the hooks lie exactly opposite to each other. The cast is set aside until it becomes hard. Now that the cast is dry throughout, it is ready for reapplication.

The padded coaptation splints that were used to maintain the proper apposition of the fragments, while the cast was drying, are now removed, leaving the flannel bandage in place. The cast is sprung open and the limb replaced in it without disturbing the bone fragments. Whatever space the splints and their pads occupied in the cast is now compensated for by the snug lacing. For average cases four layers usually suffice to give support and durability to the cast, but in very heavy patients, or, where it is desirable for patients to walk in the cast, an extra layer or two is necessary.

Sometimes advantage in strength may be derived from corrugated metal strips running the entire length of the cast. Again, greater elasticity may be had from semi-circular springs incorporated in the cast. A cast of this description fits accurately, is not heavy or uncomfortable and can be removed and replaced as many times as desirable without altering its structure.

Another example of the usefulness of sodium-silicate is in fracture of the clavicle. The arm is put up in the velpeau

position with cotton bandages, which are thoroughly coated over with sodium-silicate by means of an ordinary paint brush. This soon becomes hard, giving a firmness to the dressing, that prevents any disarrangement until it is necessary to remove it.

Again, take fracture of both bones of the fore-arm, after the ordinary anterior and posterior splints have been applied, if the whole be incased in a layer or two of silicate bandage there will not be a chance for the dressing to become misplaced, which is likely to happen with children.

With orthopædic cases too poor to buy the best mechanical apparatus, silica can be made to serve an endless number of needs as a substitute for better and more costly appliances.

The manner of preparing silicate bandages can be described briefly. A water-tight, trough shaped box to hold the silicate solution is best made from well seasoned poplar wood. This box has rounds to guide the bandage to the bottom of the trough and also a windlass attached to its top. The most suitable material for the bandages is the ordinary unbleached cotton cut in widths from two to four inches. The sodium silicate is poured into the box and the bandages made to pass through it so that they become thoroughly saturated. These prepared bandages are placed in a glass jar containing a quantity of the solution and when the jar is full, the top is sealed with some of the silica, to prevent evaporation of its water. The bandages are always ready for use and keep indefinitely.

PYLORIC OBSTRUCTION.

By W. O. Nisbet, A.B., M.D.,
Professor Diseases of the Gastro-Intestinal Tract in the North Carolina Medical College; Physician, Diseases Gastro-Intestinal, to the Presbyterian and Saint Peter's Hospitals, Charlotte, N. C.

Introduction—The pyloric portion of the stomach, the head of the pancreas, the upper part of the duodenum, along with the gall bladder and gall ducts, lie in that zone of the right upper abdomen wherein surgery has done its most brilliant recent work. Yet while the surgeon has done much to relieve the diseased conditions in the region, as well as help clear up their pathology, still there remains a creditable work to be done by the medical man. Hence in considering pyloric obstruction, we will find that certain of its forms are amenable to medical treatment, while others are purely surgical.

Pyloric obstruction is a narrowing of the pyloric outlet, which delays or prevents the normal escape of the food into the duodenum. It is not primarily a disease, but is a sequence of a number of diseased conditions.

The first form we will consider in this paper is the spasmodic obstruction due to gastric hyperacidity. Here we have a contraction of the pyloric sphincter and adjoining muscular fibres, the exciting cause of which is the presence of an excess of free hydrochloric, acetic or butyric or lactic acids. If arising from free HCL we find that the food has taken up the amount of this acid necessary for digestion, but the gastric glands having acquired the habit of over-secretion, continue to pour out the acid, which being uncombined acts as an irritant and excites spasm; to explain the origin of this spasm it is well to recall the physiological fact brought out by Pavlof, the Russian physiologist, that there is a relationship existing between the stomach and bowel digestion; if

the stomach contents are too acid, the pylorus contracts and will not allow the contents to escape into the duodenum any more rapidly than the juices of the intestine can neutralize them. With this fact in mind, we can very readily see how the emptying of the stomach is abnormally delayed in hyperacidity and how fermentation and irritation and pyloric spasm are favored by, what we call a physiological delay, in addition to that arising from the local effect of the free acid on the pyloric mucosa.

The case which I will now describe is a concrete example of this spasmodic form of pyloric obstruction:

T. H. A., white male, aged 25, musician; is a strenuous worker and rapid eater. Family history clear; heart, lungs and kidneys normal. Patient stated that for the past two years had suffered from headache, epigastric fullness, and burning pain beginning one to two hours after meals, which would terminate in severe cramps several hours later; these cramps are characteristic of pyloric spasmodic obstruction.

This patient was give an Ewald test breakfast and contents for analysis removed one hour later. Result of analysis: odor acid; mucus, absent; HCL—60; total acidity—80; combined acidity—20; Lugol's solution showed presence of starch; lavage showed emptying of the stomach was delayed one to three hours beyond the normal time; this delay, accompanied by cramps is the best evidence of the pyloric obstruction.

Treatment—This patient was placed on a diet in which albumenoids predominated; also forbade acids, spices, fruits, tea and coffee.

Belladonna was ordered before meals; alkalis after meals; along with Carlsbad salts on rising to control constipation.

Patient was more comfortable from the beginning of treatment and at the end of three months he reported saying that he felt practically well; however, I advised him to live hygienically and follow diet for six months longer.

Pyloric Obstruction in Gastic Atony and Gastroptosis—The second form of pyloric obstruction I would call your attention to is, that arising from pyloric kinking in gastroptosis and atonic dilatation; in this type of obstruction there is no inflammatory infiltration of the pyloric mucosa; the obstruction is produced by the traction of an overloaded and dilated stomach or of a ptosed stomach, on the fixed part of the duodenum and thereby produces a narrowing of the pyloric outlet and this is the explanation of the dragging pains which occur four to six hours after meals.

The usual clinical course is brought out by the following case:

A. M., minister; age 60; appeared for treatment in August, 1903; family history clear; heart and lungs normal. Patient had typhoid fever at 35 years of age and was followed by slow convalescence and digestion had not been satisfactory since; symptoms grew worse two years ago, and since then was made uncomfortable by sensations of dragging and fullness in epigastrium; for the past six months the patient stated that he had been suffering from, in addition to the above symptoms, severe colicky pains, coming on four to six hours after meals; and had lost in all 40 pounds in weight.

On physical examination the lesser curvature of the stomach was found to be two fingers' breadth below the tip of the sternum; while the greater curvature was located at a hand's breadth below the umbilicus; there was also marked splashing on succussion, and morning lavage showed food taken the preceding evening. Analysis: stomach contents showed H—30; A—80; C—20; odor of butyric acid, odor marked.

Treatment—Patient was ordered to eat breakfast and dinner and omit supper; to wash stomach with a 1-500 salicylic acid solution before retiring; no liquids were permitted with meals; breads to be all toasted; meats to be taken as hash or ground and made into sausage or boiled until the fibres fell apart.

Medical treatment consisted in ascending doses of nux vomica before meals along with cascara to keep bowels open; also advised one hour's rest on right side after meals. In addition to this a properly fitting abdominal bandage was ordered worn night and day. By the use of this bandage the traction on the pylorus, and hence the pyloric obstruction is relieved and the treatment resolves itself into that of motor insufficiency. I would call to your attention the marked physiological rest which is given the stomach in motor insufficiency by allowing only two meals a day along with the complete emptying of the stomach by lavage before retiring; this gives these almost exhausted stomachs 10 to 12 hours rest in the 24. The above mentioned patient gained 25 pounds in six months; pyloric cramps disappeared; and the stomach was empty six hours after a full dinner; and the greater curvature had ascended to within a finger's breadth of the umbilicus. I do not believe that these ptosed stomachs ever completely regain their normal location.

Pyloric Obstruction, ctd.—A third and more common condition which pyloric obstruction complicates is pyloric ulcer; pyloric ulcer clinically occurs in two forms: (a) the acute, round ulcer and (b) the chronic indurated ulcer; in acute ulcer, the pyloric obstruction is produced by a spasm of the pyloric portion of the stomach, excited by the irritant action of the hyper acid contents on the nerve endings in the ulcerated area; if properly treated a goodly percentage of acute ulcers will permantly heal; and the pyloric obstruction disappear.

Chronic Indurated Ulcer—This form is more extensive in area than the acute and usually involves all the coats of the stomach and may cause sufficient inflammatory infiltration to partially at first, and later, completely prevent the food from passing into duodenum; the stomach, for a while, can overcome by hypertrophy this pyloric resistance, but as the heart finally dilates in the face of the stenosis of

its orifices, so somewhat similarly with the stomach in pyloric stenosis; and it matters not whether the obstruction be due to spasm, inflammatory infiltration or the contraction of the cicatrix of an ulcer, if the obstruction be continued long enough, it will eventuate in dilatation.

The leading clinical symptoms and diagnostic signs of pyloric obstruction in chronic and acute ulcer are exemplified in the two following cases:

J. M. G., white, male; age 26; clerk at a restaurant lunch counter. Patient stated that he was a rapid and frequent eater and was fond of fried foods; and that he had long hours of service and little out-door life; family history clear; patient appeared well nourished, but was anæmic; in giving history of his case patient stated that for twelve months he had suffered from pain and fullness in the stomach, which came two to three hours after chief meals; pain was made severe by acids and condiments and was relieved by alkalis (this is the pain of hyperacidity); patient also stated that within the past three months there had been a change as to the time of appearance of the pain; in that the pain appeared within a half hour after taking food and was relieved by vomiting (this is characteristic of the pain of ulcer); and that furthermore, when there was no vomiting the pain grew most intense three to four hours after meals and was like colic (this is the pain of pyloric obstruction.) It is very seldom that we find the stages of pain so typical as in this case. Physical examination revealed the presence of the dorsal and epigastric tender points of ulcer. As it was not deemed safe to use the stomach tube, the patient was instructed to take a test breakfast and try to retain it for a half hour; this he did and then vomited enough for analysis. The analysis showed HCL, 45. Three days after being put to bed on milk diet, a test of the stool showed occult blood.

This case made satisfactory recovery after five weeks' course; the pyloro-spasm disappeared after the first week of treatment.

The next case illustrates the pyloric obstruction from chronic indurated ulcer:

M. A. P., white, male, age 29; family history clear. Three years ago case was diagnosed gastric ulcer and was given ulcer cure and grew better; latter symptoms returned and was treated again, with only slight improvement; when seen by me, examination revealed circumscribed tenderness over the pylorus; the lesser curvature of the stomach was in normal place, but the greater was a finger's breadth below the umbilicus. It was found also that the stomach emptied itself fairly well of liquids, but that solids caused severe cramps three to four hours after ingestion. A diagnosis of pyloric obstruction from chronic ulcer was made and the patient sent to a surgeon, who did a posterior gastro-jejunostomy, and there was found a saddle ulcer of the pylorus. Patient made a prompt recovery and in three months had gained 25 pounds in weight. It would be interesting to follow the history of this case and see if there has been established a vicious circle from loop formation. It appears that some of the cases where the posterior operation has been done that after an apparent cure lasting for a number of months, this loop complication develops and as yet we have not found the ideal operation.

Pyloric Obstruction from Carcinoma—A fourth form of pyloric obstruction is that occurring as a consequence of benign and malignant tumors of the pyloric portion of the stomach. Benign tumors in this region are so infrequent that we need not consider them. Pyloric obstruction from carcinoma is of frequent occurrence and gives its most marked symptoms late in the disease. The leading symptoms are stagnation and retention of food, with vomiting occurring every 24 to 48 hours owing to the inability of the contents to escape through the pylous; but the dominant symptom is the severe cramps engendered by the efforts of the stomach to overcome the resistance. Liquids are better borne than solids. A glass and a half of water in the earlier stage will leave the

stomach in two to three hours, while a meal of solids will be retained five to eight hours.

Treatment—Treatment is surgical and palliative.

Surgical treatment promises little unless operation is done early—done before adhesions to the surrounding organs have taken place and before the cancer toxines have saturated the patient's system.

Early operation necessitates early diagnosis and this brings up the question, how are we to get these cases in the hands of the surgeon early enough to offer the patient any hope of prolonging his life. The best answer I can give to this question is this: that we are, perhaps justified in advising an exploratory laporotomy, with preparation to do a pyloric resection, based on the following conditions: if there comes into our hands a patient who is past middle life, and who has had no digestive derangement preceding the present trouble, and if we find there has been persistent loss of weight, strength and appetite, especially appetite for meats, and if there is an absence of free HCL from the stomach contents; and also, if there is no discoverable disease of other organs to account for the symptoms; then we should put this patient to bed and give the treatment which will ordinarily improve chronic gastritis, which is the only stomach disease to exclude, and if at the end of six weeks there is no improvement, then we should advise exploratory incision.

By following this course, some non-malignant cases might be subjected to exploration; while on the other hand, many cases which now go surely to death would have their lives prolonged.

My personal experience with cancer is this:

In 843 cases of gastro-intestinal disease, of which I have record, I have found cancer in 36; of the 36 malignant cases pyloric cancer and hence pyloric obstruction existed in 16; and in all save three of the 36, the disease was beyond the operative period when first seen. It would be interesting to

know what the experience of the other members of the Society is on this point.

In conclusion I would say that the palliative treatment of pyloric obstruction due to cancer consists in relief of the food stagnation by regular stomach washing; nutritious liquid diet and the bitter tonics.

Other Forms—There are still other forms of pyloric obstruction, such as that produced by the contraction of the cicatrices of pyloric ulcer; and a form which occurs in chronic hypertrophic gastritis; also a form produced by adhesions following peri-gastritis and plastic peritonitis and a pyloro-duodenal form produced by the spasm, pressure and pain of cholelithiasis and cholangeitis, but it would unduly prolong this paper to consider these.

TO WHAT EXTENT SHOULD WE BE CONSERVATIVE; TO WHAT EXTENT RADICAL WITH OUR SURGERY IN THE TREATMENT OF OVARIAN DISEASES?

By J. F. Highsmith, M.D., Fayetteville, N. C.

This is a subject which has been, and is of great interest to the gynecologist—and in fact, to the profession at large. As the years roll by and the pendulum of opinion, moved by personal experience, swings to the extreme right and left, I occupy a mid-position. Each case requires individual treatment. We learn and with experience unlearn; cancel many methods and adopt new ones which we hope to be more lasting. I shall briefly take for my guide an experience gained from perhaps five hundred laparotomies for ovarian diseases. Not going into detail with each case, but using briefly illustrative cases from these. I shall state facts as I have observed them in my experiences. Trusting the same may elicit a free discussion with much knowledge gained for myself and relief to future patients.

In the first place I try to be conservative in my work in a true sense. The object of all surgery is to *save* life, to *restore* function, and *relieve* suffering. A diseased and functionless ovary should be removed if health is impaired and the condition of the ovary can not be improved by surgical work. *Whenever* it is possible to restore true function to an organ it should be done. This can often be accomplished by breaking up adhesions, evacuating corpus luteum cysts, and cysts of the graafian follicles, and the excision of the small hematoma of the ovary, etc. We must feel satisfied that the effort to save a portion of the ovary is for the best interest of the patient considering her interest, her position in life, her married relations, and other circumstances bearing upon her welfare.

No gynecologist should do an injustice to his patient by robbing her of an organ when he has an assurance of being able to help her back to health by conservative treatment. It is equally unjust to the patient to try to save an organ which is either a menace to her life or a source of invalidism. We must endeavor to be honest, considerate and thoughtful toward our patient and if we follow these lines we will make no mistake of heart and few of head in handling these troublesome intrapelvic conditions. Whenever in doubt as to what is best to do give the patient the benefit of the doubt and the chances are we will make fewer mistakes. True in quite a number of cases after doing conservative operations on the appendages it has been necessary to resort to a second operation. But when one remembers the pitiful wrecks that are often seen where radical operations have been done early in life, he hesitates a long time before completely removing the pelvic contents.

The old German adage "Qui boni diagnoscit, curant," is ever true. We must diagnose our cases well, then we shall cure well.

We must first thoroughly study our case and with all things taken into consideration try to be *sure* of our diagnosis. There are quite a number of cases where after using hot douches and building the patient up all symptoms of ovarian disease disappear. Or if not entirely relieved they will go along comparitively comfortable. I have treated many such cases. To report each case thus treated would grow tiresome, but to illustrate, I briefly cite the following cases:

Mrs. J. D., white, age 38, mother of five children, came in the hospital extremely nervous, much run down in every way. Youngest child two years old. Gave a history of having suffered after the birth of the child; had fever and did not convalesce satisfactorily; looked as though she had suffered from infection. She had been a physical wreck ever since this attack. An examination showed the right ovary much

enlarged and prolapsed, with a great deal of thickening of the right broad ligament—endomentritis also present. This case was thoroughly curetted, kept in bed for four weeks, using tonics and hot douches daily. She steadily improved and was discharged from the hospital at the end of five weeks. While she has not become pregnant since, now four years since the birth of the last child, she is active in her domestic duties and reports that she is feeling first class.

Mrs. J., white, age 30, married for five years, consulted me. Anæmic, nervous, constipated, etc. Gave a history of suffering greatly from leucorrhœa and dismenorrhœa; periods irregular. On examination the uterus was found to be in position with a prolapsed left cystic ovary very painful on pressure. She would not consent to have the ovary removed, which was my best judgment should be done. She had been advised by other surgeons that it should be removed. I gave her tonics, regulated her secretions, kept her quiet, dialated and curetted, and used hot douches daily. She greatly improved in health. A short while afterwards became pregnant and gave birth to a living child, much to her delight. She has been well since, up until the past spring, when she consulted me again, somewhat run down in health. I found the ovary in very much the same condition as four years previous, but no worse.

I could cite many other cases similarly treated with results equally as good. Please do not understand me to be an advocate of pessirus, hot douches and tampons, but we do have cases sometimes where we are forced by the patient to resort to this kind of treatment, with results not so bad after all, but rather encouraging sometimes.

Where acute pelvic abscess is present evacuation of the purulent material per vagina is found to yield most satisfactory results and it is not necessary to remove the appendages. In this class of cases I call to mind numerous cases drained per vagina with best of results—it only being necessary to go

in through Douglass's cul de sac, letting out the pus and setting the patient at an angle 45 degrees. These cases usually have many adhesions, but they seem to take care of themselves. One of these cases opening the abscess per vagina and she clear of fever for several days with no signs of further inflammatory trouble, requested that I make an incision and examine her ovaries. She and her husband would feel much better satisfied if the ovaries were removed—she having had several miscarriages with most alarming complications. I consented to do the exploratory incision. On entering the peritoneal cavity from above I found the fundus of the uterus with the ædonexer on each side a perfect mass of adhesions to the bowels. I was plainly in trouble. There was nothing left for me to do but make a complete removal of the uterus with the appendages. The woman came very near dying, for she was critically ill. She got well, to my joy, but I quietly decided in my own mind that the next case of this kind would not be operated upon for the removal of the ovary or ovaries so soon after having drained an acute pelvic abscess per vagina.

In bad inflammatory infections non-acute where no abscess has walled itself off, and it is impossible to drain through the per vagina, I think it a mistake to act conservatively. These cases do better to remove the ovary complete. My experience has been where the pathological changes come from a chronic inflammatory lesion it is not wise to leave any portion of the ovary for it will give further trouble. Hence in the end it is more conservative to remove than leave behind any portion of such an ovary. The same holds true if the ovary has undergone disintegration from specific trouble.

Mrs. I., age 30, mother of one child six years old, consulted me, giving a history of suffering continuously from her periods; constant pain and soreness over both ovaries, with periodical chills, with fever to follow. On examination I found both ovaries much enlarged, very touchous. After

opening the abdominal cavity both ovaries were found to be thoroughly disorganized with very small portions of healthy ovarian tissue, tubes healthy. I removed both ovaries complete. There being so many adhesions I drained for forty-eight hours through the abdominal wound. The patient made an uninterrupted recovery, has had no further trouble and has been perfectly well ever since.

Mrs. B., consulted me at the same time and suffering very much in the same way as Mrs. I. On opening the abdominal cavity I removed the right ovary, broke up a good many adhesions about the left, and she being so extremely anxious for children, I left the left ovary. Six months later she returned suffering as badly as ever. On examination per vagina I found the ovary I had left twice the size as six months previous. I advised the removal of this ovary; the patient consented. She made an uneventful recovery. Went along for three or four months in my absence extremely nervous, almost crazy. When I returned home she told me there was something else dreadfully wrong. On examining her I found absolutely nothing and so informed her. She got out of bed and since then has been in perfect health. I draw the following conclusion from this illustrative case: When the ovaries are densely adherent, necessitating more or less mutilation in freeing them from a vicious portion, it is better to remove them than to follow conservative principles. Further, that the greater the diseased condition of an ovary the less the suffering of a nervous character following the removal of the ovary.

Cysts of the graafian follicles and the corpus luteum cysts fortunately are not removed nearly as frequently as formerly. Many good ovaries have been removed. It is hard to tell in many instances just where to draw the line. The mere fact that four or five large graafian follicles are present in the same ovary is no indication whatever for the removal of the ovary—the only thing that is necessary is to puncture the cysts, that is if the remainder of the ovary not occupied by the cysts is apparently healthy. If, on the other hand, the cap-

sules show considerable thickening and there are evidences of other cysts forming, I think it best to extirpate the ovary. And I must say here that where it is necessry to resect a portion of an ovary careful operative technique is very important. The surgeon should use, if possible, continuous sutures of the finest cat-gut, instead of interrupted ones. Where there are many ends of sutures lying free there is always a possibility of the intestines or omentum becoming adherent, giving rise to subsequent trouble.

Mrs. L., white, married, age 30, mother of one child five years old, consulted me. She was delicate, suffering greatly at her periods, dragging pain; could not walk, nervous, gradually losing flesh. On examination found the left ovary much enlarged with a general relaxation of its ligaments.

January 15th, I removed this left ovary and she left the hospital three weeks afterwards in good condition. The right ovary at this time, to all appearances, was healthy with the exception of two or three small cysts, which were punctured. She held her own, gaining in flesh and general tone—periods regular until January, 1906, two years after the first operation, at which time she began to be irregular. Continued to suffer with bearing down pains in the lower pelvis. On examination I found the right ovary much enlarged, and she requested that I remove this ovary, which I did in November, 1906. Since the removal of this ovary she has not been nervous, her periods have not returned, of course, which has given her a rest. She has gained twenty pounds in flesh and thus far enjoys good health.

Mrs. W., white, age 30, mother of two children, consulted me, January, 1903. On examination the right ovary was found to be much enlarged—absolutely cystic. Two days afterwards the ovary was removed. The left ovary had one cyst of considerable size which was removed. This patient was a nervous wreck. After the operation she speedily recovered, has been a hard worker ever since, enjoying perfect

health, regular at her periods. Two years after the operation gave birth to child at term with no complications.

Now with these two cases who could tell just how far to be conservative? But it seemed to me the best thing to do was to give the patient the benefit of the doubt.

Hematoma of the ovary, if of large size, we had better extirpate—if of small size, excision. An interesting case came under my care May, 1903: Miss A., age 20, consulted me for what she had been told was a retroversion of the uterus. On examination I found in the cul de sac a mass very sensitive. I recommended an operation, which was consented to, and on May 25th made an incision. I found a hematocele of the left ovary as large as a hickory-nut or larger. I thought it best to remove the ovary complete, which we did. The right ovary was healthy. This patient made rapid recovery—all her nervousness passed off—she discarded her glasses, which it was necessary for her to wear, and was in perfect health May 9th, 1905, two years after the first operation; in the meantime this patient had married; she was returned to me, giving a history of a few days previous suffering with excruciating pain in the region of the right ovary. And from the description of her case by her physician, looked as if she might have ectopic, as there was more or less shock with extreme pain, etc. On re-opening the abdomen, it having been two years since the first operation, I found a hematocele of the right ovary the size of a small acorn. I excised the hematocele in the usual manner, leaving the ovary. The patient was again, to all appearances, in perfect health, with no pains or aches—not nervous and looking the picture of health. Shortly after this operation she became pregnant, carried the child to term, and since, I am informed, enjoys good health. I have noticed that these patients with hematocele of the ovary suffer greatly and are especially in an uncontrollable nervous state.

In fibroid tumors of the uterus I have made it the rule where I did a hysterrectomy to leave an ovary if it was pos-

sible. Where the ovaries are prolonged and in a healthy condition they should never be removed, but should either be stitched to the fundus of the uterus or, as may be done in many cases, to the round ligaments.

Conclusion.—First, where the ovaries are densely adherent, necessitating more or less mutilation in freeing them from a vicious position, it is better to remove them than to follow conservative principles. Especially is this true if there has been tubal infection. Or when the ovary has undergone a natural pathologic change, I have had little success in attempting to conserve a portion of it. It is certainly better to remove it if the other ovary is normal.

Second. Simple cysts of the graafian follicles, corpus luteum, etc., are to be treated conservatively, if the remainder of the ovary which is not occupied by the cyst is apparently healthy. If, on the other hand, the capsule shows considerable thickening and there are evidences of other cysts forming, act radically—remove the ovary.

Third. Hematoma of the ovary, if of large size, more or less occupying the whole ovary, extirpation; if of small size, excision.

Fourth. Prolapsed ovaries should not be removed simply because they are prolapsed, but should be stitched either to the fundus of the uterus or, as may be done in many cases, to the round ligament.

Fifth. Where acute pelvic abscesses are present, the result of infection, mere evacuation of the purulent material per vagina often is all that is necessary.

Sixth. There are quite a number of cases with the diseased ovary where, after using hot douches and building the patient up, the symptoms entirely disappear. But this is not the rule.

And last, but not least, it is of the most importance that the surgeon be well versed in a careful, well-grounded knowledge of pathologic conditions, since upon this depends his conclusions which must permanently influence another's life. A good rule is to give nature the benefit of our ignorance or doubt.

AN INTERESTING CASE.

By John W. Neal, M.D., Monroe, N. C.

On June 26th I was called to attend Mrs. W. Found her in the first stage of labor. Presentation O. L. A. Progress perfectly normal. After about an hour a girl, weighing 6½ pounds, well developed and perfectly normal in every respect, was born. The uterus did not come down at once in size as usual. Upon examination, found that there was another fœtus, though evidently much smaller than the first. Presentation, breech, S. R. P. Pains came on in a few minutes. Membranes ruptured. Hips delivered in a few minutes. Body descended rapidly, and as it passed down I rotated body to prevent the chin from catching above the symphesis pubis. There was not the least stop in the expulsion until the entire fœtus was expelled, when, to my astonishment, I found that it had neither head, face nor arms. There were no cranial or facial bones, and apparently no cervical vertebra. No eyes, ears, nose or mouth. Just above the upper end of the sternum there was a small cleft, bounded above by a small cartilagenous ring, rather angular or pointed in front. On either side and a little back of this cleft there was a small lobe, almost perfectly spherical, one about three and the other about five lines in diameter, attached by small pedicals from one to two lines in diameter. The upper extremity of the trunk was rounded off smoothly, except for the rather abundant and loosely adherent skin, which was covered with hair. There were no marks pointing location of eyes or nose, and the two small lobes on the sides of the cleft the only suggestions of ears, and there were no *meati* at or near these. We presume that the cleft is possibly an abortive effort at a mouth. At the points on each side of the trunk, where we should look for arms, there were no appearances, if any attempt, at arm formation, but instead, just at

these points, there were small dimples, one on each side. The remainder of the body seemed normal. Sex, female. Genilalia well formed and normal. Lower limbs well formed and normal, except the feet. Each foot had just four toes. The four toes on the left foot were in line as they should be, but on the right foot the great toe was placed so as to come more in opposition to the other three, like the thumb.

The fœtus was kept alive until delivery, of course, through the cord; but I noticed no movements of either limb or any part of body after expulsion. I did not discover any pulsation of cord, and there was no effort at respiration. Weight of fœtus, $2\frac{1}{2}$ pounds.

There was one placenta, but two amniotic membranes. The cord was small and had its origin near the center of the placenta and near the origin of the cord of the other fœtus. The cord was very tortuous, ran along on the surface of the placenta to its margin, and there was continuous with and attached to the membranes for about three inches further. The twin sister is still living and growing nicely.

HYPEREMESIS GRANDARUM.

By J. W. Neal, M.D., Monroe, N. C.

On the border line between physiology and pathology we have the vomiting of pregnancy. The intimate connection of the sympathetic nerve supply of the pelvic viscera with the hypogastric nerve makes any disturbance of any of the pelvic contents quite likely to set up emesis. Especially is this true of the uterus and its adnexia. When pregnancy exists the very active changes that are taking place in and around the uterus, the increased blood supply, the rapid and constant growth of the uterus with the consequent changes of position and disturbances of the other pelvic organs bring about not only a hypersensitin activity of the uterine nerve supply, but the entire nervous system is thrown into a state of exaggerated susceptibility to both external and internal influences.

The result is that a shock or pathological condition that would pass unnoticed, or be tolerated without the least disturbance in the non-pregnant, in the pregnant may, and frequently does, set up the most violent, persistent, and uncontrollable vomiting.

The condition is found not solely but largely among the better classes, the well educated and refined, especially among the devotees of fashion. The severer types are rarely found among the laboring classes. In an eighteen years' practice in the country we met with it but rarely and only a single severe case, while in six years work in town we have met with it quite frequently and had six cases of extreme severity in four ladies.

There is no single etiological factor to be found in all cases. The causes are both physiological and pathological. The one physiological cause is the pregnancy, the normal physiological growth of the uterus with its contents and the consequent disturbance of the neighboring parts. The pathological causes

are many, and Dr. Williams divides them into three groups: *reflex, toxæmic* and *neurotic.*

The reflex causes are to be found in the parturient tract and pelvic viscera. The most common are the flexions and versions, and displacements of the uterus, congenital or acquired, metretis, hard, unyielding bands in and about the cervix, most especially about the internal os, intestinal disorders, constipation and indigestion.

The toxæmic causes are found in the blood changes brought about by incomplete metabolic processes and the toxins of infections.

The neurotic causes lie in the hysterical character of the patient and show no visible pathological changes. However, we may not assume that none exist. In fact, while pregnancy is the exciting cause of the vomiting of pregnancy, we very much doubt whether there is ever a vomiting of pregnancy without some underlying pathological cause.

A diagnosis is not always easy. The vomiting is only a symptom, and a co-existing pregnancy may not be a causative factor in its production. We recall the instance of a lady who developed nausea and vomiting on rising from the bed in the morning. Pregnancy was suspected, but none was found to exist. The nausea and vomiting increased and the lady finally developed a well marked case of basilar meningitis. A correct diagnosis can be made only by a thorough examination of the uterus and adnexia and all the pelvic contents not only to determine whether a pregnancy exists or not, but to find what pathological changes may also exist. Nor should this examination be left as a last resort while tampering with empirical remedies. The cases of toxæmic origin can only be diagnosed by a complete analysis of the urine. When none of these causes are found to exist the case is by inference neurotic.

Prognosis is good in all cases save where there are found grave blood changes—the toxæmic variety. In these it is always grave. Unfavorable symptoms are excessive albu-

menuria, very marked and progressive anæmia, absolute inability to retain nourishment, a rapid and especially weak pulse, faint cardiac impulse with sharp, distinct second sound, tendency to syncope, a peculiar substernal distress, which becomes especially severe at night.

Treatment is hygienic, medicinal and gynecological. The hygienic surroundings should be made as perfect as possible. The apartments should be airy, cheerful and quiet. A trained nurse, kind yet firm and tactful is to be desired. A daily bath should be given. The food should be liquid or semi-solid, concentrated and nutritious, but easily digested, taken at definite intervals and in definite quantities. Nourishment should be taken at least once or twice during the night. If indigestible foods are really desired they should be allowed only in very small quantities. The morning meal should be taken in bed and digestion allowed to get well under way before any attempt should be made to rise. If the case is at all severe, the horizontal position must be maintained absolutely. If food can not then be retained rectal alimentation should be kept up with peptonized milk and eggs every eight hours.

Coition should be prohibited and all excitement avoided. Medicinally empirical treatment is as unsuccessful and unsatisfactory as it is unscientific and unreasonable. There are no specifics, notwithstanding the vaunted virtues of ingluvin and the statement of a noted physician that one-half grain cocaine mur. and three grains camphor-monobromate will invariably control the vomiting of pregnancy. If there is indigestion or constipation, these should receive proper treatment. In the reflex varieties the bromides are frequently serviceable. Opium and belladonna in suppositories have served us well, especially in cases attended by excessive ptyalism. Neurotics are successfully treated by suggestion and the rest cure. If the kidneys are not acting well or the urine is loaded with effete material, and in the toxæmic variety especially, retained enæmiæ of normal salt solution will be of great service.

Gynecologically any abnormality found in the parturient tract should receive proper treatment. Flexions should be corrected and the uterus retained by sterile gauze tampons saturated with sterile vaseline or glycerine, if there be much congestion. Cervical catarrh should be treated by applications of saturated tincture of iodine and tampons, as above.

Firm, unyielding bands in or about the cervix are treated by dilatation.

As the last resort, we come to abortion. When the patient has reached the condition in which most of us are willing to consider the question of abortion, they have really reached the stage at which abortion is most likely useless. Abortion, if to be considered at all, should be considered early. Especially is this true of the toxæmic variety. If the toxæmia is profound and the kidneys are acting poorly, a consultation should be called at once, to consider the question of abortion. Other varieties, if properly treated, probably never demand abortion.

SCOPOLAMINE—ITS ORIGIN, ACTION AND THERAPY.

By K. P. B. Bonner, M.D., Morehead City, N. C.

In selecting this drug as a subject, I realize that I am treading on shaky ground, on account of the numerous discussions which have been published about the action and chemical composition of Scopolamine. In fact, in reading the numerous articles of different observers, I find that no two agree in the entirety on the action of it. The most disputed point is its action on the heart, although there is a great dispute as to its action on the nervous system. Some observers claim that chemically it is identical with hyoscine and even go so far as to claim an identical physiological action.

So, in bringing this drug to your notice I shall be governed by my own observations of its action—and leave you to take them for what they are worth.

Origin.—Scopolamine is one of the alkaloids of Scopola, which is the dried rhizome of Scopola carniolica, a perennial plant growing in Southern Europe. The official form of it is the hydrobromide, and the chemical formula $CI_7H_2INO_4Br$. Scopolamine was first isolated and discovered by Schmidt. Schneiderlin was the first to use it—in May, 1890. It was first used in obstetrics by Von Steinbeuchel in 1901.

This drug occurs in white crystals. The dose varies from gr. 1-600 to 1-60.

Action.—*Externally*—On skin, in solutions, has little if any action; and what it has is slightly local anæsthetic. On mucous membranes, it has slight if any action. Little is absorbed if any.

Circulatory.—In medicinal doses the action seems variable, but in the majority of the cases the pulse is quickened; but the pulse may fluctuate within reasonable limits so far as

the rate is concerned. After a dose of gr. 1-100, one patient may have a steady rise of rate of pulse from 80 to 100 or 110, and it may then fluctuate from 110 to 95 per minute. Another may have no acceleration of pulse at all; while another patient's pulse may fall from 100 to 80 or normal when the drug takes effect. From what I have observed about the drug this action varies within reasonably narrow limits. The fluctuations are not enough to be of any danger. Dr. Gauss, Assistant Director of the University Woman's Clinic at Freiburg, Germany, has probably had more experience with this drug than any living man; and he states that he uses it in all cases that present themselves and has used the drug on a great many women who had valvular disease of the heart and has never had a death from the use of it.

While the pulse rate is, as a rule, quickened, the tension is lowered or practically the same, which condition is readily understood from the fact that it is a vaso-dilator. Which fact is proven by a flushing of the face. This may be the cause of the quickened pulse, due to the removal, in part, of the "visa-fronte."

By what way the pulse rate is quickened I am unable to say. In all probability it is due to a depression of the inhibitory nerves and a stimulation of the accelerators. So far as I know personally, it may be due to either one or the other. On the vessels themselves we can readily see that through its vaso-dilator action the vaso-dilator nerves are stimulated and the vessels become larger and capillaries as well.

Respiratory.—Medicinal doses do not affect the respiratory system at all except to regulate it.

Muscles.—It causes a slight hardening of abdominal muscles—otherwise I can find no action that it has.

Alimentary Canal.—Does not seem to affect it at all.

Secretion.—It does not seem to affect any of the secretions except that it causes a drying of the mucous membrane of the mouth and throat.

Eyes.—It is a mydriatic, but acts slowly in this—sometimes not at all.

Nervous System.—Its action on the brain seems to me to be that of a cerebral sedative, but feebly so. Probably the most peculiar action of all is that of its selective action on the center of memory. A patient remembers nothing that transpires after getting the full effect of the drug, until the effect leaves. Although, all during the action of it, the slightest sound or touch may awaken them, or at any rate loud talking or shaking can awaken even when the patient is deeply under the effects of the drug. When awakened, the patient can carry on an itelligent conversation, talk sensibly and seemingly be perfectly conscious; but will not remember one minute what was said to them or they said to you the last minute, and if left quiet will drop off in a light sleep again, or what is known in Germany as the "Daemmerschlaf" or "Twilight Sleep."

On the Spinal Cord.—Scopolamine seems to have a more powerful action on the motor nerves than the sensory. However, it is a depressant to both; but very much more so to the motor nerves. That it is a sensory depressant is proven by the fact that when the patient is under the full influence of the drug there is no great notice taken of a slight pinch or pin-prick. That it has no powerful action as a sensory depressant is proven by the fact that the patient will complain of the pain, if they had any on going to sleep, when awakened by shaking or loud talking, if asked about it. As a proof that Scopolamine is a powerful motor depressant, a patient complains of being unable to move themselves when under the influence of it.

Untoward Effects.—These consist largely of mental excitement, delirium, exaggerated reflexes and great restlessness. Hallucinations of sight and hearing may occur. There may be conversations carried on with imaginary persons. These are usually caused by administration of too large doses. I

have never seen but one case of such unpleasant effects and after such symptoms had lasted about an hour or an hour and half, the patient quieted down and enjoyed a refreshing sleep and on the next morning remembering nothing of the effects and claimed to feel well—better than she had felt in several days, as she had been suffering with asthma for two days prior to this time. Her asthma, by the way, was gone. These untoward effects were caused by the administration of gr. 1-125 of Scopolamine.

Disadvantages.—Beside the untoward effects dependent upon too full doses, I find that in some cases the extreme dryness of the throat and mouth is a disadvantage; but this can easily be remedied by giving water a plenty. Another disadvantage is that it does not have a more powerful action on the sensory nerves; but the action on the center of memory compensates for this.

Advantages.—On account of its general anæsthetic action it is much preferable to chloroform or ether, in that it does not have to be administered practically continuously and that it does not require watching. Even when one or the other is required in addtion to Scopolamine, it takes so small an amount that it practically eliminates all danger from general anæsthesia. The after-effects are none; while chloroform or ether have great nausea and vomiting with its train of symptoms. Furthermore, Scopolamine eliminates post-operative pain by the fact that the patient gradually comes out from under the influence of it—sometimes being as long as 24 hours before the effect has entirely left.

Its advantage over hyoscine is that it is much more powerful from the fact that hyoscine is not as great a motor depressant or a cerebral sedative. Its action on the center of memory is more powerful. I have proven this in one particular case, namely, in the same patient with the same disease I used gr. 1-100 of each drug at different times. At the time that I used hyoscine the patient had no appreciable

effect of the drug; while on the other hand, when I used the Scopolamine in 15 minutes after administering the drug I had the full effect practically.

For relieving pain, it has a great advantage over morphine in that it does not produce the "dopy" effect of great stupor. There are no unpleasant after-effects with Scopolamine; on the other hand morphine has numerous such symptoms, namely, nausea and vomiting, a feeling of malaise, lack of appetite as well as torpid bowels. It has not the great habit-forming properties of morphine.

Method of administration.—The consensus of opinion seems to be that it is better to use just a little morphine sulphate with Scopolamine, as it seems to re-inforce the action of the drug; in other words, to make strong the weak points, namely, to cause a more powerful action of a cerebral sedative and to depress the sensory nerves more. Usually from gr. 1-8 to 1-6 is sufficient for this purpose.

In a given condition if there is time enough, the usual method of administering is to give in all gr. 1-75 if necessary, but to have this amount divided into 3 parts. Each part to be given hypodermically and repeated not oftener than every hour until the drug takes effect or the 3 doses have been given. With the first injection combine from gr. 1-8 to 1-6 of morphine and do not repeat. A very convenient method of getting an exact dosage is to dissolve a given amount into distilled or sterile water so that 15 or 20 minims will equal a given amount, for instance, gr. 1-200.

This constitutes the German method of using Scopolamine in a brief descriptive way. In other words, the object is to use small doses repeated every hour until the required effect is produced.

Another quicker method is to use as much as gr. 1-100 and gr. 1-6 of morphine in a single injection and to wait an hour to see what the effect will be, and if necessary, to repeat with a minute dose to get the desired results. The second is usual-

ly not required. Scopolamine begins to take effect in about 15 or 20 minutes and this can be discerned by the patient becoming quieter and dozing off to sleep, the breathing is quieter, and the pulse rate becomes accelerated, usually rising to 90 or 100 with a full pulse. When asked how they feel, they usually reply that they have a drunken feeling. Undoubtedly the best sign that can be taken as an index to the effect of Scopolamine is the "Memory Test." Objects, different at each time, are shown the patient and when he or she is unable to name the last shown, we may know that the full effect of the drug is obtained. One great fault in not getting good results with Scopolamine is that a great many use too little of it and, as a consequence, the patient is excitable. This is fully as much a cause of poor success as in using too much.

Therapy.—Scopolamine is indicated wherever a general anæsthetic, anti-spasmodic, somnifacient, anagesic, hypnotic, narcotic, anodyne, or anti-convulsant is needed. Its field of greatest usefulness seems to be in obstetrics. To my mind, it is an ideal obstetrical anæsthesia. Dr. Gauss, of the Freiburg Woman's Clinic in Germany, has, probably, had the most extensive experience with the drug in such cases of any living man. He reports 1,000 deliveries without a single death, with a great reduction of the numerous complications incident to labor, and a great reduction of infant mortality.

I have used this drug in a number of cases with uniformly good results and will cite briefly four cases to give some idea of its action and leave you to judge its efficiency.

Case 1.—A woman of very nervous temperament. The case in question was her second confinement. Was called at about 7:30 p. m., and, after making an examination, found the os well dilated with the head advancing. Pains were close together and severe and she was making a great outcry. I immediately administered Scopolamine gr. 1-100 and in 15 minutes the lady had the full effect of the drug and al-

though the pains were as severe and lasted just as long, she made no outery, but bore down with her pains. She was delivered at 9:30 p. m. and dropped off to sleep from which she did not awaken until 4:00 the next morning. On awakening inquired if her baby was born. During pregnancy her dread of the labor was almost morbid.

Case 2.—A woman of exceedingly nervous temperament. Had had hard times in her previous confinements. Was called at 9:00 a. m. When I reached the house I found that her pains were severe and close together and her outery was almost alarming the neighborhood, so severe was her pains. After making an examination I found the os well dilated and the head advancing. Gave Scopolamine gr. 1-100 and in 15 minutes she was resting nicely and when her pains came on, did not cry out, but bore down to them with a renewed confidence. At 11:00 a. m. she was delivered of a 10 1-2 pound boy and knew nothing of her suffering or delivery until she awoke at 4:00 p. m. and inquired if "All was over."

Case 3.—This case is of peculiar interest in several respects. This was the lady's sixth confinement. In all of them, prior to this time, she had never had a normal labor, having been delivered by forceps in nearly all cases and had had puerperal convulsions in all of them. Was called about 7:30 p. m., labor was just beginning, so I contented myself with preparing. About 12:00 that night she began to complain of everything being dark and seeing people who were not, accompanied by slight spasmodic seizures. Although the os was only dilated about the size of a quarter, I gave gr. 1-100 of Scopolamine and in 15 minutes she was dozing and resting quietly except when the pains would come on and then not make any great outery. At 5:00 a. m. she was delivered of a 14 1-2 pound girl baby. I am satisfied that this lady would have had eclamptic convulsions but for the drug. The pain would have been almost unbearable with such a

size child and nothing to relieve. As it was, she went off to sleep after the labor was over and told me afterward that she knew nothing of her labor.

Case 4.—This lady had given birth to one child prior to this one but had had severe puerpal convulsions. About 5 days previous to the labor in question, I was called to her about 1:00 a. m. and found her in severe convulsions. I used a small quantity of chloform to relax the spasms and immediately administered Scopolamine gr. 1-100 and morphine sulphate gr. 1-6. In 15 minutes I withdrew the chloroform and her convulsions did not return. Five days later was called in a great hurry about 8:00 p. m., when I reached the house the "old women" told me that the waters had broken suddenly, while she was sitting up and that "something was wrong." Making quick preparations and giving a little chloroform to quiet and ease the patient (for she was in extreme pain), I found a breech presentation, the feet and legs having been already born. I administered at once Scopolamine gr. 1-100 and morphine gr. 1-6, which soon took effect. With help, the child was born at 9:30 p. m. It was a still birth, showing signs of maceration, as the skin slipped off whenever touched. The child had evidently been dead for some time. Pregnancy had gone on for about 7 months.

One caution to be observed is not to administer Scopolamine until the first stage of labor is well advanced, in other words,—the os is fairly well dilated and the contractions of the uterus begin to be severe, of long duration and close together. Othewise, it is my opinion that labor will be somewhat prolonged, although numbers of eminent physicians believe and advise differently.

Probably the next most important therapeutic indication for scopolamine is in the surgical field. Its advantages are that in a large number of the cases, chloroform or ether is not required; and if required at all, only a small amount is necessary. It can be used in cases where chloroform or ether can not.

Korff reports over 400 cases without accident. Blos, of Carlsruhe, used it in 105 cases, the majority of which the effects and results were ideal. Many other eminent surgeons have used and are using scopolamine with equally good success. When I say surgery, I do not mean minor surgery; but the most important major surgery. My experience with scopolamine in this connection is very limited. However, I will cite briefly one case. I removed a 38 calibre bullet under this anæsthesia with as good results as a person could wish.

Besides these two great indications, scopolamine has a wide field of usefulness. It is indicated in almost any condition where great pain exists. In fact, I have largely replaced morphine with this drug, but, as a general rule, use a small quantity of morphia to enhance its action. It is applicable in such conditions as hepatic, renal, and intestinal colics, ovaritis, obstructive dysmennorhœa, inflammatory rheumatism, trifacial neuralgia, nervousness, and hysteria. It is useful in certain spasmodic conditions such as asthma, hysterical convulsions, and eclamptic convulsions.

In closing this paper, I shall be satisfied if I have added anything to your knowledge of this drug, or will cause any of you to use it in such conditions as I have named. At any rate I am sure that you will be more than satisfied with the result obtained.

RECENT ADVANCES IN RAILWAY RELIEF DEPARTMENT.

By W. E. Headen, M.D., Morehead City, N. C.

Mr. President and Gentlemen of the Medical Society of North Carolina:

There was a time when North Carolina was called the "Rip Van Winkle State," but no longer can she be so spoken of, and what is it more than anything else that has caused her to awake from her slumber? Among the most important, is not, the intersection of the State with railroads; for without proper transportation facilities, no section can advance to any great degree.

Along with the building of railroads and rapid transit, have come, as a necessity, various accidents calling for treatment. This has become such an important factor that our State Medical Society has deemed it wise to add to our other sections that of railway surgery.

The great railway systems, not unmindful of the good of their own employees and of the traveling public, have organized on all their roads Relief Departments and are continually improving the same.

So, as Chairman of the Section of Railway Surgery, I shall endeavor to tell you of some of the advancements being made in these departments.

There are a great many factors to be taken into consideration for the making of the best Relief Departments; some of these are—the length of the road; the character of the country through which it runs; the number of the employees; the speed and character of the trains run, etc.

The several roads have organizations peculiar to themselves, but all are becoming more and more systematized.

The first Relief Department consisted simply of a chain of local surgeons distributed as nearly equidistant along the line

of the railroads as possible, so as to be in easy call in case of a wreck. After this, in order to have more system, a chief surgeon was added, who should direct and be the head. As the system grew the railroads made arrangements with hospitals in the towns through which they ran to care for the injured in case of accidents and they were paid a fixed sum for treatment and board. Then seeing the need of it, the roads began to build hospitals of their own, and the injured were treated by their own surgeons. This has proved to be very satisfactory, and helps to minimize suits for damages.

Some few of the roads have adopted the hospital car, which is nothing more nor less than a modern hospital on wheels and which can be hurried to the scene of a wreck, and most urgent cases can get the benefit of a hospital right on the ground, and all the injured carried to larger quarters comfortably with the necessary operations done en route.

Some few of the systems have still farther advanced along these lines and besides their corps of surgeons, hospitals and hospital cars, they have an insurance feature among their employees.

Before an applicant is employed he must go through an examination by a railway physician as to his physical health, especial emphasis being put upon hearing and eyesight, and if he is so fortunate as to pass, he then, by paying a small amount monthly out of his wages (from 50 cents to $5.00) according to the amount of his salary, in case of an accident or sickness, he is to get free treatment in the hospital and besides get so much a week for the family dependent upon him; and in case of death his family receives a stipulated sum. This plan has been found to work admirably. It has weeded out of the service of the road the physically incompetent and has secured protection for the dependents and the best medical and surgical treatment for the most lowly as well as the high salaried official.

The Plant system has gone farther than any other in per-

fecting their Relief Department and have in successful operation the mutual insurance feature. They find that it pays in more ways than one. They have a better class of operatives, who take more interest in their work and does away with so many suits for damages.

Another feature in which a well organized relief department is doing good work is in car sanitation. This is very important as we know that people with all kinds of contagious diseases insist on traveling on trains, especially is this case with consumptives, seeking a change of climate for the benefit of health.

This condition is being worked out on the big systems upon the advice of the medical departments. Cars of luxurious appointments with rich curtains and carpets are giving way to those of hard wood as few cracks and crevices in which germs can find lodgement and that can be easily cleaned and fumigated, and this is thoroughly done at the end of each run. The ventilation of the cars is also being improved and a great many different suggestions are being tried, and those proving to be the best are being adopted.

REMARKS ON RAILROAD SURGERY.

By J. M. Parrott, M.D, Kinston, N. C.

To my mind the most important general fact in railroad surgery to be remembered, is that it is in a class to itself, and is a special branch of surgery. The railroad surgeon who realizes this succeeds best. General surgical principles, for example, asepsis, etc., apply. So they do to ophthalmic surgery, the minutiæ of eye surgery places it in a class to itself, as they do with railroad surgery.

To be sure a simple fracture is a general surgical legion and is to be treated in the same manner regardless of its causative factor, but these simple general surgical injuries form but a small part of the railroad surgeon's work.

A contusion produced by heavy machinery if often more destructive ultimately, than one caused by a lighter implement. Shock to the trophic nerves, while not apparent at times, microscopically is generally causative of a destructive gangrene, which may necessitate an amputation, or other extensive surgical works.

Several years ago I was called to attend Mr. A, a young man whose tarsus had been contused in a railroad accident. The injury on casual inspection seemed to be rather simple and superficial; close examination revealed dislocation and fracture of two tarsal bones, and rather though apparently not very much injury to the soft parts. It did not occur to me that there was the least danger of the loss of the limb. In a few days, however, gangrene and other symptoms developed, which necessitated the removal of the limb. In this case, while there was a decided infection, all ultimate danger could not be explained by this. Without doubt, shock to the immediate tissues, destroying the forms of the cells, played a most important role.

We have noted time and again the fact that contused

wounds, though but slightly lacerated, suppurate more freely than incised ones. So in this case and for the reason mentioned, solutions which are too strong have sometimes a destructive effect on the tissues.

While thus developed, so to speak, the tissues resist infection but feebly, if at all, and it is particularly important that the local circulation be kept at its best and the most rigid æsepsis practiced. To accomplish this end the local circulation must be encouraged by limb elevation thorough and complete enveloping the extremity in large amounts of absorbent cotton, to promote warmth, rather loose bandaging, systemic stimulants and tonics and the free use of large quantities of hot sterile water containing a minimum amount of chemicals (antiseptics).

In all contusions, even though apparently simple, the utmost precaution should be exercised along the lines suggested, that infection be prevented and an early and prompt restoration of contused tissues to their normal condition. The wise surgeon will watch all railroad contusions carefully, and will exercise the utmost and especial precaution to prevent infection and to encourage local nutrition.

Not only do local shocks lower the vitality of tissue immediate to the injury, but oftentimes produce nerve manifestations of a general and clear character. Injuries of this kind are oftentimes followed by prolonged and aggravating neurotic symptoms.

Some time ago I was called to see Mr. B, who was thrown from a hand-car. He sustained a fracture (simple) of two ribs and sprained ankle and an apparently slight contusion of the back. The first two injuries yielded to treatment promptly, severe pain continued in the lumbar region and ere long the patient developed a pronounced train of symptoms usually classed under the caption traumatic neurasthenia. A prolonged rest treatment together with massage, etc., will effect a cure, as they have done in many other cases.

The mind of these patients plays an important role in the disease and is in my opinion, in many cases, somewhat at fault. It is absurd to say these are malingerers or hysterics. They are not and can only be completely cured when they are taught to forget themselves.

The prognosis in railroad injury to the spine or vertebral region should always be guarded and all such cases should be handled with the utmost care.

The management of shock in railroad injuries, taxes the skill of the surgeon. Stimulation should be systemic and must not be overdone, heat and rest are important and the general surgical rules governing such cases should prevail, especial care being exercised to guard against reaction. My personal experience has led me to condemn digitalis in such cases and I am not very fond of using the vaso-dilators, such as nitro-glycerine, except in rare instances where especially indicated by the given symptoms. I prefer the simple nerve stimulants and those which have especial action on the heart fibres and ganglia. The vaso-constrictors put extra work on an already shock weakened heart and the vaso-dilator nerves, if such there be, one usually over stimulated in shock, and hence there is no need for further stimulation. I prefer ammonia, strychnine, atropine, heat and of all, the most important, rest, in the treatment of railroad shock.

The question when to amputate and where has perplexed the profession from time to time. For my part, when in doubt, I do not amputate, so that the puzzling question with me is when to be in doubt. This must be answered at the bedside after considering all the points in the individual, and it can not be settled in a didactic or in a general way.

One should never be in too great a hurry to amputate. Where to amputate can not be determined except by the study of the individual case and as in answering, when, the patient should be given the benefit of the doubt.

Drainage is an important and ever recurring proposition in railroad surgery. Almost every case requires more or less. The majority of injuries occur to those who are already soiled with dirt and grease. This renders æseptic preparation of the parts very difficult, even under the most favorable circumstances. A drain is preferable to all others and should be removed as early as possible, the time for removal being judged by local and general conditions. When in doubt, drain temporarily, loosely, but thickly applied temporary dressings should be used more frequently than is sometimes done. This renders frequent inspection easy, and promotes drainage.

In preparing a lacerated contused wound, covered with oil and grease, large quantities of water containing potash soap, or a can not be improved upon, in fact, for cleansing purposes, it is indispensable and can not be improved upon. It should precede bichloride. Strong solutions of antiseptics should best not be used. Above all, especially carbolic acid, increases the danger of the local in tissue, already greatly devitalized. A word of warning along this line is needed. In conclusion, permit me to say, that emergency should be provided and kept on all trains along the lines as employed in the field by the soldiers, but modified to meet the demands of the railroad surgeon. It would be beneficial if engineers, flagmen, brakemen and conductors were instructed in the simple rules governing the management of the injured, transportation and the care of the wounded, temporarily, and especially impressed with what to do.

A REPORT OF OBSTETRICAL CASES.

By A. S. Pendleton, M.D., Henderson, N. C.

Mr. President, Ladies and Gentlemen:

It is my purpose to present to you in a desultory sort of way, the history of some obstetrical cases which seem to me to have been rather out of the usual, and which impressed upon me very strongly the possibilities of obstetrical work in general practice.

Case No. 1.—Multipara, age 36, pelvis normal. I was called to see this case in consultation. Found body of fœtus extruded to shoulders, head retained. Uterus firmly contracted. Violent pains at short intervals with no progression. Owing to almost tetanic condition of the uterus, I was unable to determine condition of the head other than it was apparently larger than normal. Delivery was attempted by all of the usual methods, including forceps, without avail. Finally I thought I was able to detect crepitus through the uterine walls, so made a diagnosis of hydrocephalus, although it was impossible to examine, except through the abdominal walls, owing to the impaction in the pelvis. This diagnosis was confirmed. A $\frac{1}{2}$ gal. of fluid being removed by spinal rupture, after which delivery was easy. This case was of special interest in that neither the regular attendant nor myself was called until labor had advanced to the stage described. making the diagnosis especially difficult. The patient made an uneventful recovery. The fœtus was dead.

Case No. 2.—Primipara, age 19. This patient was found in a comatose condition and a history of having had convulsions at five minute intervals for the preceding 36 hours was elicited. Examination revealed a generally equally contracted pelvis with conjugate diameter about six cm., and the shoulder of fœtus presenting. Cephalic version was accomplished with much difficulty, one blade of forceps being

used to bring down vertex, and it was found possible to deliver the fœtus per vagina after crushing the head. While there was no laceration of sufficient extent to require suture nor other apparent injury to maternal parts, the patient died eight hours later, never having regained consciousness, and so in my judgment was another victim to toxæmia. In this instance, neither the transverse position of fœtus, nor contracted pelvis had been diagnosed. Had the condition been recognized and relieved at the very beginning of the attack, I am confident that the woman would be alive to-day.

I now wish to direct your attention to a condition which I find mentioned in most text-books, but to which very little emphasis seems to be given, and which the following cases would indicate is of more importance than our teachers have seemed inclined to believe. It is a condition of the lessening of the angle of the axis of the symphysis with the internal conjugate diameter. This condition materially lessens the antero-posterior diameter of the pelvis without giving any external indication of the same and therein lies the danger. Here is a condensed history of three illustrative cases:

Case No. 3.—Primipara, age 23. Pelvis practically normal from external measurements. Was called in consultation thirty-six hours after labor had begun. Examination showed following condition: normal sized, full term, fœtal head not engaged, slightly extended, and in the L. O. A. position. Pains apparently strong, from 3 to 7 minutes apart, not effective. Thinning of lower uterine wall and the contraction ring rising. Forceps were applied, and using them as a lever, the vertex was brought down, making flexion complete; after which delivery was fairly easy. Recovery of both parent and child uneventful.

Case No. 4.—Multipara, age 37. The condition found when called in consultation was as follows: Incomplete flexion at the superior strait of an apparently normal, full-term fœtal head. Strong pains not effective. Full dilatation. The

patient gave a history of three previous difficult labors, all of which being instrumental, though the largest child weighed only 7 pounds. The condition was relieved very readily as in the preceding case.

Case No. 5.—Primipara, age 26. Had been in labor twenty-four hours when seen. Contraction strong, and frequent, but not effective, though there was full dilatation. Bimanual examination showed a condition almost identical with that of the preceding two cases, and the same means brought about the same results.

Subsequent examination in the last three cases showed the trouble in delivery to have been due to the lessening of the angle of the symphysis before mentioned. In each of the cases the external measurements were practically normal. The external conjugate was normal in each. The internal conjugate as usual estimated was normal. It was necessary to use Stien's pelvimeter to determine the true cause of the obstruction. When this was used, however, the cause was very readily determined, and we wondered why it had not been discovered before. One interesting feature of the three cases is that in every instance the condition of the symphysis seemed to interfere with flexion and this rather than the contraction caused the true obstruction for when this was overcome by using the forceps as a lever to bring about the proper flexion, subsequent delivery was easy, and perhaps might have progressed without difficulty, even though the instruments had been removed. This was not done, however, on account of the weakness of the patient, and for fear of prolonging labor.

In conclusion, I would say that I have seen two cases since these enumerated, which presented the same conditions, causing the same position of the fœtal head, and relieved by the same means.

CÆSAREAN SECTION—REPORT OF CASE.

By Dr. Seavy Highsmith, Fayetteville, N. C.

It is the belief of the profession generally, that the operation for delivering a child by an incision through the abdominal wall and uterus of the mother, received its name from Julius Cæsar, who it is thought was brought into the world in this way, and who was born on July 12th, more than half a century before Christ. So far as I have been able to learn, however, we have no positive proof that Cæsar was thus taken from his mother's womb, and the skillful operator who performed the operation had no place in history, where his name should stand as does Hippocrates, who lived more than three centuries before this time, or Galen, who was born nearly 200 years later, for this operation, if performed at all, must have been a successful one, not only to this great statesman and warrior himself, but to his mother as well, since we are reminded in studying the life of Cæsar of the boy's ardent love for Aurelia, his mother. Dorland says the operation was named, as stated above, from Julius Cæsar. But, according to Hirst, the name was derived from the Latin description of the operation, "Cæso matris utero" (I shall cut the mother's uterus.) The origin of the name, however, is not of great importance to us, but the method, while it is an ancient one, is invaluable in that, in the great majority of cases in which it is indicated, it is the only method that insures life to the child and promises recovery to the mother.

Where there is no other method by which delivery can be made, as in cases of extreme pelvic contraction, or in extreme cases of hyphosis, asteomalacea, spondylolisthesis, etc., the indications for cæsarean section should be considered absolute. In cases where delivery could be made by some method, such as symphysectomy, or craniotomy, the decision is sometimes difficult and the physician should choose the operation he

thinks the least dangerous to his patient, and he may also consult her wishes in the matter, explaining to her, as best he can, the necessity and dangers of the operation.

The case that I have to report is that of Mrs. N., race, white, age 23, married to a deformed husband, occupation housewife. Family history: Father, mother, one brother and one sister living and well developed. Also one brother, age 12, with marked genu verum. Personal history: Normal at birth. As an infant she was bottle-fed on account of poor health of her mother. At one month she was wasted to a frame with diarrhœa, which lasted until she was four months old. Began to crawl at twelve months. At three years of age had whooping cough, checking her growth. Did not walk until she was five years of age. Began menstruating at the age of sixteen and was very irregular. Married at twenty-three years of age and was confined little less than a year later. She had a deformed and contracted pelvis with short undeveloped lower extremity. Above the pelvis, development was normal. Patient had been healthy since childhood. She was first seen in labor by Dr. E. P. Williams, of Stedman. He diagnosed her as pregnant at term and seeing that she was a rachitic dwarf and that to deliver by the usual methods could not be accomplished, he called Dr. J. F. Highsmith in consultation. Having decided upon cæsarean section, the patient was sent to the Highsmith Hospital for operation. After being in labor for twenty-four hours and riding twelve miles across the country, she was admitted to the hospital late in the afternoon on August the 8th, 1906. Although she had considerable pains and her waters had ruptured soon after labor set in, the child's head had not engaged in the superior strait. So, as soon as the patient could be prepared, and on the same night that she was admitted, the operation was performed by Dr. J. F. Highsmith and myself. Having her sufficiently under the anæsthetic to be insensible to pain, but not completely relaxed, holding the uterus firmly against the abdominal wall, a free incision was made from just above

Patient, Husband and Baby, Three Weeks after Operation.

Showing Line of Incision, Three Weeks after Cæsarean Section.

the symphisis pubis to the umbilicus; this rapidly done, the uterus was brought up into the wound but not outside the abdominal cavity. This was also rapidly incised and the child was delivered and turned over to a nurse as soon as the cord had been tied. In this case, we were unfortunate in cutting down upon the placenta which was attached anteriorly. The hemorrhage was considerable and would have been profuse had I not constricted the blood vessels by grasping them firmly with my left hand around the lower uterine segment. Some authors advise the use of a tourniquet for this purpose, but I think the hand is much the better instrument, as you are not likely to do so much damage to the tissues. As soon as the placenta was delivered, the blood vessels immediately retracted along with the contraction of the uterus, and the hemorrhage practically ceased. The uterus was then brought together by a single layer of interrupted silk sutures, which were passed well down, but not through the uterine wall. The abdominal cavity was dried out and all blood clots removed, and the peritoneum was brought together with cat-gut. The abdominal wound was united by one layer of buried cat-gut, through and through silk worm-gut, and cutaneous sutures of silk. A firm dressing with gauze bandage was applied. The patient was put to bed and re-acted well, as did also her 5½ pound baby (girl). She suffered very little afterward, milk came on the third day. After this she ran slight fever for a few days and developed a small abscess at the lower end of the wound, which was opened on the 19th day after the operation. This rapidly healed by granulation and the woman and child were both able to leave the hospital at the end of the fourth week after the opration. Dr. Williams, her physician, wrote me a few days ago, saying that about four months after she returned home, a lump appeared in her abdomen about the size of a walnut. This worked its way to the surface and ruptured, discharging a small abount of sanguinous fluid and four of the sutures that were used in closing the incision into the uterus. Shortly

after this, two others were passed through the same opening; she was confined to her bed only a few days with this trouble and has had no further complication. She and the baby, now eleven months after the operation, are in splendid health, and the operation seems to have been successful. However, there is nothing new to be presented in this case, but as cæsarean section is the rare exception and not the rule in disposing of obstetrical cases, and since, with the exception of two cases reported by Dr. W. H. Dixon at our last meeting, there has been very little said about an operation of this kind in this State Medical Society, for several years, I trust this brief report may be of interest to some members of the Society.

As to when to perform cæsarean section in those cases where it is indicated, the authorities differ—some claim that better success can be obtained by preparing your patient and doing the operation about two weeks before her full term; others hold that it is better to wait until labor has set in and uterus contractions have become regular and the waters have formed and ruptured. The latter view seems to me to be the most practical one, since it is more in accord with nature, and we would not expect so much hemorrhage as when there had been no uterine contractions. As to the best method and material for closing the incision made into the uterus, I am not prepared to say. I don't believe that silk is the proper suture, as it caused us the only complication we had in the case just reported. Sterile cat-gut, No. 3, used as interrupted sutures, passing them down to, but not through, the endometrium, and close enough to get good approximation of the wound, seems to me to be the proper method.

I hope to have these points discussed by the Society.

TREATMENT OF THE ALCOHOL AND DRUG HABIT.

By W. G. Telfair, M.D.

Gentlemen of the North Carolina Medical Society:

I am not going to deliver a temperance lecture, or take up much of your valuable time in talking about myself or my work. I wish to interest you in a subject which I think has not received sufficient consideration of the profession, and to ask your co-operation in what I have made my life work, in instructing a certain class of suffering humanity and their friends, that they are afflicted with an easily curable disease, and not criminals or outcasts, but are entitled to consideration and attention from the medical profession, that there is a great deal which may be done to relieve their sufferings, that in fact, most of them may be restored to health and become useful and respected members of society.

I allude to a large class of intelligent and sometimes brilliant men and women who have become diseased through the inordinate use of alcoholics and drugs, and who from a feeling of degradation and hopelessness, have become besotted drunkards and drug fiends.

As a class they are sensitive and averse to being treated for this condition, feeling that it is a disgrace to seek medical aid, since to do so is an acknowledgement of weakness.

Now, since alcoholism is recognized by all scientific men the world over as a diseased condition of the nerve centres, why should we not do all in our power to help this unfortunate class? We should instruct them that their condition is one of disease; that there is no more disgrace in being treated for it than in seeking medical advice in any other diseased condition. I wish to state that most of these cases can be cured, and I make the statement after more than fifteen years experience in handling exclusively this class of cases, that the results are as

satisfactory as any in medicine under proper conditions. To accomplish the best results the patient must be treated in a special sanitarium for such cases, and under the constant supervision of the physician, therefore, the treatment of such cases is rarely successful in general practice, and are always annoying to the general practitioner, and there are other great advantages in sanitarium treatment: the psychological effect of environment, the moral support of a number of men banded together for a common purpose, all play an important part in producing the desired results.

It is to me a deplorable fact that but few ethical or even regular physicians have entered this field, it has been left almost entirely to the ignorant, or dishonest physician, and in many cases the arrant quack. There are, however, a few ethical and up-to-date sanitaria throughout the country, which are entitled to your support, and where these cases can be intelligently and honestly treated, and I ask you to give the matter due consideration when approached upon the subject of what to do, or where to go. You could not doubt the efficacy of sanitarium treatment if you could see the bright intelligent men whom I have treated at their annual meeting and banquet, with their happy wives, in the city of Rochester. A great many of the so-called cures for alcoholism do more harm than good, often turning their patients out with a pocket full of innocent looking, but deadly morphine pills, with instructions from the attending quack to take one when nervous. While in Asheville a short time ago, my attention was called to a flaring advertisement in a North Carolina paper of a three-day cure, and was a case of the pot calling the kettle black, in attacking another institution of the same character, accusing them of various murders and other heinous things. I asked my friend, who called my attention to it, who in the State of North Carolina could be caught by such stuff as that, and was astonished when told that he had known some very intelligent people to go there for treatment, among them two or three physicians. It appeared to me that it was simply a

case of "fooling some of the people some of the time." Now, a few words about the drug habit and I am through. I know that it is a popular belief that this condition can not be cured, and that is undoubtedly so under ordinary conditions, or even when attempted in a general hospital, existing mental conditions make it so. Opium habitues are generaly deficient in most important elements which determine moral and physical vigor, an unstable nervous system renders them abnormally sensitive to painful impressions, they are absolutely unreliable, and almost irresponsible. To effect a cure requires a special study of each case, discovery and removal of any pathological condition which may have induced the habit, absolute control, and constant observation of the patient, with unswerving vigilance of attendants until the craving for the drug has passed, and all functions have become normal. Therefore, it is utterly useless to attempt treatment in private practice or in the patient's home, and the physician who attempts it will surely meet with disappointment. Now, gentlemen, let me thank you for your courteous attention and if I have succeeded in interesting you even a little in this subject, which has become a hobby of mine, I shall feel more than repaid for my journey from my home in Rochester.

The North Carolina Association for the Prevention of Tuberculosis.

Constitution.

ARTICLE I.—NAME.

The name of the association shall be "The North Carolina Association for the Prevention of Tuberculosis."

ARTICLE II.—OBJECT.

The object of the association shall be the prevention of Tuberculosis, (a) by the study of the disease in all of its forms and relations, (b) by the dissemination of knowledge concerning its causes, prevention and treatment, and by supplementing the work of the State Board of Health in this cause, (c) by such other means as may from time to time be deemed advisable.

ARTICLE III.—MEETINGS.

The meetings of the association may be held at such times and in such places as may be directed in the By-Laws.

ARTICLE IV.—INCORPORATION.

The names and residences of the incorporators are:
M. L. Stevens, M.D., Asheville, N. C.
R. H. Lewis, M.D., Raleigh, N. C.
J. Howell Way, M.D., Waynesville, N. C.
James M. Parrott, M.D., Kinston, N. C.
W. H. H. Cobb, M.D., Goldsboro, N. C.
James A. Burroughs, M.D., Asheville, N. C.
Albert Anderson, M.D., Wilson, N. C.
Ben. K. Hays, M.D., Oxford, N. C.
Geo. G. Thomas, M.D., Wilmington, N. C.
Chas. A. Julian, M.D., Thomasville, N. C.
Watson S. Rankin, M.D., Wake Forest, N. C.
Kenneth M Ferguson, M.D., Southern Pines, N. C.

By-Laws.

ARTICLE I.

MEMBERS.

SECTION 1. Any person who shall pay $1.00 or more into the treasury of the association shall have his name enrolled as a member for the year in which such payment is made.

SEC. 2. The payment of $25.00 at one time shall entitle a member to a life membership.

SEC. 2. Persons who have, by original research or as sanitarians or as philanthropists, eminently aided in combating tuberculosis may be elected honorary members.

ARTICLE II.

OFFICERS.

SECTION 1. The association shall, at its first meeting and annually thereafter, elect a Board of Directors. This board shall consist of twelve members, but may hereafter, at any regular or a special meeting, be increased by electing one director from each county (of the State) in which this association has members.

SEC. 2. The Board of Directors shall make its own rules and shall have entire charge of the business and work of association. Committees shall have the power to execute only what is directed by the board.

SEC. 3. The Board of Directors shall annually elect from its own members a President, two Vice-Presidents, a Secretary and a Treasurer, who shall be the officers of the association.

ARTICLE III.

COMMITTEES.

SECTION 1. The Board of Directors shall appoint an Executive Committee of five directors, of which the President and the Secretary shall be members *ex-officio*, to which shall be entrusted all the executive work of the association.

SEC. 2. The Board of Directors is empowered to appoint representatives to the International Committee on Tuberculosis, the National Association for the Study and Prevention of Tuberculosis and the North Carolina State Medical Society. It shall also, from time to time, appoint such committees as may be necessary for scientific and educational work, and for the holding of meetings and congresses.

ARTICLE IV.

QUORUM.

Five directors shall constitute a quorum of the Board of Directors.

ARTICLE V.

MEETINGS.

There shall be one stated meeting of the association each year at a time and place to be fixed by the Board of Directors. Other meetings of the association may be called by the Board of Directors at such a time as it shall deem proper. The Executive Committee shall hold stated and other meetings as may be directed by the rules of the Board of Directors.

ARTICLE VI.

MONEYS.

The moneys received from membership fees and from all other sources shall be used for defraying the expenses of the association and for furthering its objects, under the direction of the Board of Directors.

ARTICLE VII.

AMENDMENTS OF CONSTITUTION.

Propositions to amend the Constitution may be presented in writing at any meeting of the Board of Directors, or of the association, and may be voted on at the meeting of the association next following; *provided, however*, that no proposition for amendment shall be voted on within thirty days after its presentation, nor without at least twenty days' notice of the meeting at which it is to come up for consideration, which notice shall set forth the proposed amendment in full. An affirmative vote of two-thirds of the members present shall be required for the adoption.

ARTICLE VIII.

AMENDMENTS OF BY-LAWS.

The By-Laws may be amended in the same manner as the Constitution or by a two-thirds vote of the members present at a meeting of the Board of Directors; *provided*, that in the latter case the proposition to amend has been presented in writing at a previous meeting of the association, or of the Board of Directors, and that subsequently to such presentation twenty days' notice in writing has been given of the proposed amendment in the call for the meeting.

CONSTITUTION AND BY-LAWS

OF THE

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

[Adopted at the Fiftieth Annual Session, Hot Springs, N. C , June 3, 1903.]

ARTICLE I.—Title of the Society.

The name and title of this organization shall be "The Medical Society of the State of North Carolina."

ARTICLE II.—Purposes of the Society.

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of North Carolina, and to unite with similar organizations in other States to form the American Medical Association; with a view to the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interests; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine; so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—Component Societies.

Component societies shall consist of those district and county medical societies which shall hold charters from this State Society.

ARTICLE IV.—Composition of the Society.

Section 1. This Society shall consist of Members, Delegates, Guests, Honorary Members, and Honorary Fellows.

Sec. 2. Members.—The Members of this Society shall be the members of the component county medical societies.

Sec. 3. Delegates.—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component county societies in the House of Delegates of this Society.

Sec. 4. Guests.—Any distinguished physician not a resident of this State may become a guest during any annual session upon invitation of

the Society, or its Council, and shall be accorded the privilege of participating in all of the scientific work of that session.

Sec. 5. The Honorary Members shall consist of such regular physicians as have won distinction by their contributions to medical science; those elderly physicians who, prior to their retirement from practice, have displayed a proper interest in the welfare of this Society, or who, by their example, have reflected credit and honor upon the profession. They must be nominated by the Council and receive a two-thirds vote of the members of the House of Delegates present at the meeting at which their names are presented for election. They shall be exempt from all dues and fines, and shall be entitled to all the privileges of the Society, except the right to vote and hold office.

Sec. 6. The Honorary Fellows shall consist of such physicians as have been members of this Society continuously for thirty years, and whose dues have been paid during that time. They shall receive a two-thirds vote of the members of the House of Delegates present at the meeting at which their names are proposed for promotion. They shall be exempt from all dues and fines, and shall be entitled to all the privileges enjoyed by active members in good standing.

ARTICLE V.—House of Delegates.

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegates elected by the component county societies, and (2) *ex officio* the officers of the Society as defined in this Constitution.

ARTICLE VI.—Section and District Societies.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate sections, and for the organization of such councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VII.—Sessions and Meetings.

Section 1. The Society shall hold an annual session, during which there shall be held daily not less than two general meetings, which shall be open to all registered members, delegates and guests.

Sec. 2. The time and place for holding each annual session shall be fixed by the House of Delegates.

ARTICLE VIII.—Officers.

Section 1. The officers of this Society shall be a President, three Vice-Presidents, a Secretary, a Treasurer, and ten Councilors.

Sec. 2. The President and Vice-President shall be elected for a term of one year. The Secretary, Treasurer and Councilors shall be elected for terms of three years each. All of these officers shall serve until their successors are elected and installed.

SEC. 3. The officers of this Society shall be elected by ballot, a majority of the votes cast being necessary to elect, by the House of Delegates on the morning of the second day of the annual session, but no Delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance upon the annual session and who has not been a member of the Society for the past three years. Any nominee for the office of President shall have been an active member of the Society for five years, including the year of his election, shall have attended two of three meetings immediately preceding his nomination, including the meeting at which he is nominated; and shall be a member in good standing at the time of his nomination.

ARTICLE IX.—THE BOARD OF MEDICAL EXAMINERS.

SECTION 1. The seven members of the "Board of Medical Examiners of the State of North Carolina" shall be elected by ballot for a term of six years, a majority of the votes cast being necessary to a choice. The election shall be held on the second day of the annual meeting, and the balloting shall continue until the entire number is elected.

SEC. 2. A vacancy occurring from any cause other than expiration of term of office, shall be filled by the Board or a quorum thereof.

SEC. 3. The elective members of the State Board of Health, and of the State Board of Medical Examiners for Nurses, shall be elected by ballot on the second day of the session.

ARTICLE X.—FUNDS AND EXPENSES.

Funds for meeting the expenses of the Society shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society, to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publications. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publication, and for such other purposes as will promote the welfare of the Society and profession.

ARTICLE XI.—REFERENDUM.

The general meeting of the Society may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the general meeting, submit any such question to the membership of the Society for a final vote; and if the persons voting shall comprise a majority of all the members of the Society, a majority of such votes shall determine the question, and be binding upon the House of Delegates.

ARTICLE XII.—THE SEAL.

The Society shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIII.—Amendments.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

By-Laws.

CHAPTER I.—Membership.

Section 1. All members of the component county societies shall be privileged to attend all meetings and take part in all of the proceedings of the annual sessions, and shall be eligible to any office within the gift of the Society.

Sec. 2. The name of a physician upon the properly certified roster of members or list of delegates, of a chartered county society which has paid its annual assessment, shall be *prima facie* evidence of his right to register at the annual session in the respective bodies of this Society: *Provided*, that licentiates of the State Board of Medical Examiners may, if the House of Delegates so elects, at the meeting of the Society at which they receive their license, be entitled to register upon payment of the annual dues for that year, and be accorded all the privileges of other members for that year, the Secretary of the Society entering their names and so certifying to the secretary of the county society where the said licentiates reside, but said licentiates desiring to continue membership in this Society must affiliate with their local county society.

Sec. 3. No person who is under sentence of suspension or expulsion from any component society of this Society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take any part in any of its proceedings until such time as he has been relieved of such disability.

Sec. 4. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

CHAPTER II.—Annual and Special Sessions of the Society.

Section 1. The Society shall hold an annual session at such time and place as has been fixed at the preceding annual session.

SEC. 2. Special sessions of either the Society or House of Delegates shall be called by the President at his discretion, or upon petition of twenty delegates.

CHAPTER III.—GENERAL MEETINGS.

SECTION 1. The general meetings shall include all registered members, delegates, and guests, who shall have equal rights to participate in the proceedings and discussions; and, except guests and honorary members, to vote on pending questions. Each general meeting shall be presided over by the President, or in his absence or disability, or by his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President, and the annual orations, and the entire time of the session, so far as may be, shall be devoted to papers and discussions relating to scientific medicine.

SEC. 2. The general meeting shall have authority to create committees or commissions for scientific investigations of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved by the House of Delegates.

SEC. 3. Except by special vote, the order of exercises, papers and discussions, as set forth in the official program shall be followed from day to day until it has been completed.

SEC. 4. No address or paper before the Society, except those of the President, Orator and Essayist, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

SEC. 5. All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet annually at the time and place of the annual session of the Society, and shall so fix hours of meeting as not to conflict with the first general meeting of the Society, or with the meeting held for the address of the President and the annual orations, and so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interests of the Society and profession require, it may meet in advance, or remain in session after the final adjournment of the general meeting.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every twenty-five members, and one for each major fraction thereof, but each county society holding a charter from this society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate.

SEC. 3. A majority of the registered delegates shall constitute a quorum, and all of the meetings of the House of Delegates shall be open to members of the Society.

SEC. 4. It shall, through its officers, Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation therto.

SEC. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especialy and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate work in medical centers, as well as home study and research, and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies. (With these ends in view, five years after the adoption of these By-Laws, except by unanimous consent of the Committee on Scientific Work, no voluntary paper shall be placed upon the annual program, or be heard in the Association, which has not first been read in the county society of which the author is a member.)

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Asosciation in accordance with the Constitution and By-Laws of that body, in such manner that not more than one-half of the delegates shall be elected in any one year.

SEC. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 10. In sparsely settled sections, it shall have authority to organize the physicians of two or more counties into societies, to be designated by hyphenating the names of two or more counties, so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 11. It may divide the counties of the State into ten councilor districts, and, when the best interest of the society and profession will be promoted thereby, organize in each a district medical society, to meet midway between the annual sessions of this Society, and members of the chartered county societies, and none others, shall be members in such

district societies. (When so organized from the presidents of such district societies shall be chosen the Vice-Presidents of this Society, and the presidents of the county societies of the district shall be the vice-presidents of such district societies.)

SEC. 12. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates, and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

SEC. 13. It shall approve all memorials and resolutions issued in the name of the Society before the same shall become effective.

SEC. 14. It shall present a summary of its proceedings to the last general meeting of each annual session, and shall publish the same in the Transactions.

CHAPTER V.—ELECTION OF OFFICERS.

SECTION 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect: *Provided*, that when only one name is to be balloted for, the House may suspend the rules and declare the same elected by consent.

SEC. 2. The House of Delegates, on the first day of the annual sessions, shall select a Committee on Nominations, consisting of ten delegates, no two of whom shall be from the same councilor district. It shall be the duty of this committee to consult with the members of the Society, and to hold one or more meetings, at which the best interests of the Society and of the profession of the State for the ensuing year shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the names of one member for the office of President, and one member for each of the other offices to be filled at the annual session.

SEC. 3. The report of the Nominating Committee and the election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the second day of the general session.

SEC. 4. Nothing in this article shall be construed to prevent additional nominations being made by members of the House of Delegates.

SEC. 5. Any person known to have solicited votes for or sought any office within the gift of this Society, shall be ineligible for any office for two years.

CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit by appointment the various sections of the State and assist the councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond for the trust reposed in him whenever the House of Delegates shall deem it requisite. He shall demand and receive all funds due the Society, together with the bequests and donations. He shall, under the direction of the House of Delegates, sell or lease any estate belonging to the Society, and execute the necessary papers; and shall, in general, subject to such direction, have the care and management of the fiscal affairs of the Society. He shall pay money out of the treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands. He shall charge upon his books the assessments against each component county society at the end of the fiscal year; he shall collect and make proper credits for the same, and perform such other duties as may be assigned to him.

SEC. 4. The Secretary, acting with the Committee on Scientific Work, shall prepare and issue the programs for and attend all meetings of the Society, and of the House of Delegates, and he shall keep minutes of their respective proceedings in separate record books. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the annual sessions. He shall keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society. In so far as it is in his power, he shall use the printed matter, correspondence and influence of his office to aid the councilors in the organization and improvement of the county societies, and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall act as chairman of the Committees on Scientific Work and on Publication. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

In order that the Secretary may be enabled to give that amount of time to his duties which will permit of his becoming proficient, it is desirable that he should receive some compensation. The amount of his salary shall be fixed by the House of Delegates.

CHAPTER VII.—COUNCILOR DISTRICTS.

SECTION 1. To facilitate the more perfect organization of the medical profession, the State of North Carolina is hereby divided by counties into ten councilor districts, as follows:

First District.—Currituck, Camden, Pasquotank, Perquimans, Gates, Chowan, Washington, Tyrrell, Dare, and Hyde.

Second District.—Hertford, Martin, Pitt, Bertie, Beaufort, Lenoir, Jones, Craven, Pamlico, and Carteret.

Third District.—New Hanover, Pender, Onslow, Duplin, Bladen, Sampson, Columbus, and Brunswick.

Fourth District.—Northampton, Halifax, Nash, Edgecombe, Johnston, Wilson, Wayne, and Greene.

Fifth District.—Cumberland, Robeson, Scotland, Richmond, Montgomery, Moore, Harnett, and Chatham.

Sixth District.—Wake, Franklin, Warren, Vance, Granville, Person, Caswell, Alamance, Orange, and Durham.

Seventh District.—Anson, Union, Stanly, Mecklenburg, Cabarrus, Lincoln, Gaston, Cleveland, and Rutherford.

Eighth District.—Rockingham, Guilford, Randolph, Forsyth, Stokes, Surry, Yadkin, Alleghany, Wilkes, and Ashe.

Ninth District.—Davidson, Davie, Rowan, Iredell-Alexander, Catawba, Caldwell, Watauga-Mitchell, and Burke.

Tenth District.—Buncombe, Yancey, McDowell, Madison, Polk-Henderson, Haywood, Transylvania, Jackson, Swain, Macon-Clay, Graham, and Cherokee.

CHAPTER VIII.—Council.

Section 1. The Council shall hold daily meetings during the annual session of the Society, and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. It shall meet on the last day of the annual session of the Society for re-organization and for the outlining of work for the ensuing year. At this meeting it shall elect a Chairman and Secretary, and it shall keep a permanent records of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided.

Sec. 2. Each Councilor shall be organizer, peace-maker, and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expense in attending the annual session of the Society.

Sec. 3. Collectively the Council shall be the Board of Censors of the Society. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component

societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a county society, upon which an appeal is taken from the decision of an individual councilor. Its decision in all such cases shall be final.

SEC. 4. The Council shall have the right to communicate the views of the profession and of the Society in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the Chairman and Secretary of the Council, as such.

CHAPTER IX.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.
A Committee on Public Policy and Legislation.
A Committee on Publication.
A Committee on Nominations.
A Committee on Finance.
A Committee on Obituaries.
A Committee on Arrangements,

and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be a member and chairman, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates or of the Society, or to the provisions of the Constitution and By-Laws. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented, which shall be adhered to by the Society as nearly as practicable.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Society in securing and enforcing legislation in the interest of the public health and of the science of medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall utilize every organized influence of the profession to promote the general influence in local, State and national affairs and elections. Its work shall be done with the dignity becoming a great profession, and with that wisdom which will make effective its power and influence. It shall have authority to be heard before the entire Society upon questions of great concern at such time as may be arranged during the annual session.

SEC. 4. The Committee on Publication shall consist of three members, of which the Secretary shall be one and the chairman, and shall have

referred to it all reports on scientific subjects, and all scientific papers and discussions heard before the Society. It shall be empowered to curtail or abstract papers and discussions, and any paper referred to it which may not be suitable for publication in the Transactions may be returned to the author. The Committee shall have authority to arrange for the publication and distribution of the Transactions after receiving competitive bids, and shall use diligence in getting them into the hands of the members. All papers read before the Society shall be the property of the Society.

Sec. 5. The Committee on Nominations shall be appointed and perform its duties in accordance with the provisions of chapter 5, section 2, of these By-Laws. They shall also nominate an Orator, an Essayist, a Leader of Debate, a Committee on Scientific Work, a Committee on Public Policy and Legislation, a Committee on Publication, a Committee on Obituaries, a Committee on Finance, one member of the Committee of Arrangements, Delegates to the American Medical Association, the Virginia Medical Society, the South Carolina Medical Association, and to such other bodies as the Society may determine. They shall also each third year nominate a Board of ten Councilors.

Sec. 6. The Commitee on Finance, to consist of three members, shall examine the accounts of the Treasurer and report to the Society, making suggestions as to the amount of assessments for the coming year, the remuneration of the Secretary and the Treasurer, and such other suggestions concerning the finances of the Society as they may think proper. The Committee on Obituaries, to consist of three members, shall report to the general meeting of the Society the names of all members dying during the past year, with other data appropriate for memorial publication.

Sec. 7. The Committee on Arrangements shall consist of one member elected by the House of Delegates each year, and two members elected by the county society in the territory in which the annual session is to be held. It shall, by committees of its own selection, provide suitable accommodations for the meeting places of the Society and of the House of Delegates, the Board of Medical Examiners, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

CHAPTER X—Of the Sections and Voluntary Communications.

Section 1. The newly installed President shall, at the last session of each meeting, appoint a member to serve as chairman of each of the following sections, to-wit: Anatomy and Surgery, Materia Medica and Therapeutics, Practice of Medicine, Physiology and Chemistry, Obstetrics, Gynæcology, Medical Jurisprudence and State Medicine, Pathology and Microscopy, and Railway Surgery.

Sec. 2. At any time after the meeting the chairman of each section may appoint three such members as he may select as his assistants, to work up such items as he may designate, confining himself to the general advancement in his section.

Sec. 3. The chairman of sections shall send in to the Secretary, not later than thirty days previous to each meeting of the Society, the titles of papers to be presented by themselves and their assistants, to be used by the Committee on Scientific Work in making a program for the meeting.

Sec. 4. No paper shall be read before the Society unless the author be present, unless his absence be due to some unavoidable circumstance. A paper presented by proxy may be referred to the Committee on Publication.

Sec. 5. No paper shall be referred to the Committee on Publication until it has been placed in the hands of the Secretary; and the Secretary shall not return any paper accepted by the Society without the consent of the Society, and then he shall take a receipt for the same.

Sec. 6. No paper shall be received by or read before this Society that has been presented to any other Society, excepting only a component society of this Society, or that has been offered for publication in any journal; and in any case of any paper accepted, the author is supposed to have invested with the Society all rights to its ownership.

Sec. 7. No paper shall be published in the taansactions of this Society unless approved by the Committee on Publication; and any paper rejected by said committee shall be returned to the author through the Secretary of the Society.

Sec. 8. It is to be understood that the Society is not to be considered as endorsing all the views and opinions advanced by the authors of papers published in the Transactions of the Society.

CHAPTER XI.—Assessments and Expenditures.

Section 1. An assessment of two dollars per capita on the membership of the component societies is hereby made the annual dues of this Society, which amount shall be collected by the Secretary of each county society from each of its members on or before the first day of March and forwarded to the Treasurer of the State Society before the first day of April in each year. The Secretary of each county society shall forward a statement of its assessment, together with its roster of all officers and members, list of delegates and list of non-affiliated physicians of the county, to the Secretary of this Society before the first day of April in each year.

Sec. 2. Any county society which fails to pay its assessment, or make the reports required, on or before the date above stated, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the State Society or of the House of Delegates, or receive the volume of Transactions, until such requirements have been met.

SEC. 3. All motions or resolutions appropriating money shall specify a definite amount, or so much thereof, as may be necessary for the purpose indicated, and must be approved by the Council and House of Delegates on a call of the ayes and noes.

CHAPTER XII—RULES OF CONDUCT.

The principles set forth in the Declaration of Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XIII.—RULES OF ORDER.

The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts's Rules of Order, unless otherwise determined by a vote of its respective bodies.

CHAPTER XIV.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with the State Society, or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, upon application to the House of Delegates, receive a charter from and become a component part of this Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the House of Delegates, and shall be signed by the President and Secretary of this Society. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the councilor for the district, if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualifications of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered white physician who is practicing, or who will agree to practice, non-sectarian medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or

expelling him, shall have the right of appeal to the Council and to the House of Delegates.

SEC. 7. In hearing appeals, the Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts; but in case of every appeal, both as a board and as individual councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the Society the first benefit of such labors. Official position and other preferments shall be unstintingly given to such members.

SEC. 12. At some meeting in advance of the annual session of this Society prior to the first day of April, each county society shall elect a delegate or delegates with alternates, to represent it in the House of Delegates of this Society in the proportion of one delegate to each twenty-five members or major-fraction thereof, and the secretary of the society shall send a list of such delegates with alternates to the Secretary of this Society before the first day of April preceding the annual sessions.

SEC. 13. The secretary of each county society shall keep a roster of its members, and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Society before the first day of April in each year, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster, the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XV.—Order of Business.

Section 1. General Meetings.

The President, or, in his absence, one of the Vice-Presidents, in the order of their rank, shall call the Society to order, or in the absence of all these officers, a presiding officer shall be chosen by a majority of the members present.

Address of Welcome. Response.

Any business requiring early attention may be introduced by permission and without discussion referred to the Council, the House of Delegates, or the appropriate committee.

The President's Address.

Reports of Committees.

Reports from the House of Delegates.

Reports from the Council.

Written communications upon medical subjects may be read and discussed. This shall include reports from sections as arranged each year by the program.

The Annual Oration.

The Annual Essay.

The Annual Debate.

Oral Communications and Clinical Reports read and discussed.

Final Reports from the Council.

Final Reports from the House of Delegates.

Final Reports from Committees.

Report to the General Meeting from the House of Delegates appointing the time and place of next session.

Reports from the House of Delegates of the Election of Officers and Committees.

Appointment of Chairmen of Sections by President.

Adjournment.

Sec. 2. The House of Delegates.

The President, or in the absence, one of the Vice-Presidents in the order of their rank, shall call the Society to order, or in the absence of all these officers a presiding officer shall be chosen by a majority of the members present.

Roll-call.

The President's Message.

Report of Committee on Credentials.

Reports of Committees.

Reports of Officers.

Reports of the Council.

Communications from the General Meeting of the Society.

Reports from the County Societies.

Appointment of Committee on Nominations.

New Business.

General Discussion of Measures for the Advancement of the Profession.

Reports of Committees.
Election of Officers and Committees.
Selection of Place and Time of Next Meeting.
Unfinished Business.
Adjournment.

(While there may at times appropriately be a variation from the details of the above outline of business procedure, it is the intention of these By-Laws to so arrange that the work other than the purely scientific part of the Society's proceedings be done in the Council and House of Delegates, and the general meetings of the Society be devoted exclusively to scientific work.)

CHAPTER XVI.—Amendments.

These By-Laws may be amended at any annual session by a majority vote of all the delegates present at that session, after the amendment has laid upon the table for one day.

Explanatory.—"The principles set forth in the Declaration of Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public."—*Constitution and By-Laws Medical Society of the State of North Carolina, adopted at Hot Springs, N. C., June* 2, 1903*; Chapter XII—Rules of Conduct.* Also see report Committee on Ethics, page 37 and 38, Trans. N. C. Med. Soc., 1903.

PRINCIPLES OF MEDICAL ETHICS.

(Extract from the Proceedings of the American Medical Association at the annual session in New Orleans, May, 1903.)

Report of Committee on Medical Ethics.

Dr. E. Elliott Harris, New York, read the following report:

To the President and Members of the House of Delegates of the American Medical Association:

Your enlarged Committee on Medical Ethics, consisting of the Special Committee and one delegate from each State, have unanimously adopted the following report, entitled the "Principles of Medical Ethics of the American Medical Association," which is herewith submitted.

The following report of the Special Committee shall be printed as an explanatory preface to the Principles of Medical Ethics of the American Medical Association:

Gentlemen:—Your committee has given extended and careful thought to the proposed revision of the Code of Medical Ethics referred to it for consideration. As you will note on reference to the caption of the report, the word "code" has been eliminated and the expression "Principles of Medical Ethics of the American Medical Association" adopted as adequately descriptive. In reference to this change, it is proper to say that such action on its part is based on the idea that the American Medical Association may be conceived to occupy some such relation to the constituent State associations as the United States, through its Constitution, holds to the several States. The committee, for this reason, regards it as wiser to formulate the principles of medical ethics without definite reference to "code" or penalties, thus leaving the respective States to form such code, and establish such rules as they may regard to be fitting and proper, for regulating the professional conduct of their members, provided, of course, that in doing so there shall be no infringement on the established ethical principles of this Association. The committee regard as wise and well intended to facilitate the business of the parent organization and promote its harmony this course, which leaves the State association large discretionary powers concerning membership and other admittedly State affairs. Your committee has retained, to a large extent, the phraseology of the existing code, while aiming at condensation of expression and a better understanding of some of its statements. The report of the committee has been reached unanimously, without dissension or distrust on the part of its members, each aiming to formulate a result based on principle alone, and without regard to any past or present disagreements or misunderstandings what-

soever; such being the case, the committee invites your candid and unprejudiced attention to the results of its labor, feeling that at least some good has been accomplished.

Respectfully submitted,

E. Eliot Harris, *Chairman.*
William H. Welch,
T. J. Happel.
Joseph D. Bryant.

The report of the committee was unanimously adopted.

Principles of Medical Ethics.

(Adopted at the annual session in New Orleans, May, 1903.)

The American Medical Association promulgates as a suggestive and advisory document the following:

CHAPTER I.—The Duties of Physicians to Their Patients.

Section 1. Physicians should not only be ever ready to obey the calls of the sick and the injured, but should be mindful of the high character of their mission and of the responsibilities they must incur in the discharge of momentous duties. In their ministrations they should never forget that the comfort, the health, and the lives of those intrusted to their care depend on skill, attention and fidelity. In deportment they should unite tenderness, cheerfulness and firmness, and thus inspire all sufferers with gratitude, respect, and confidence. These observations are the more sacred because, generally, the only tribunal to adjudge penalties for unkindness, carelessness or neglect is their own conscience.

Sec. 2. Every patient committed to the charge of a physician should be treated with attention and humanity, and reasonable indulgence should be granted to the caprices of the sick. Secrecy and delicacy should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted, in their professional visits, should be guarded with the most scrupulous fidelity and honor.

Sec. 3. The obligation of secrecy extends beyond the period of professional services; none of the privacies of individual or domestic life, no infirmity of disposition, or flaw of character observed during medical attendance should ever be divulged by physicians, except when imperatively required by the laws of the State. The force of the obligation of secrecy is so great that physicians have been protected in its observance by courts of justice.

Sec. 4. Frequent visits to the sick are often requisite, since they enable the physician to arrive at a more perfect knowledge of the disease, and to meet promptly every change which may occur. Unnecessary visits are to be avoided, as they give undue anxiety to the patient; but to secure the patient against irritating suspense and disappointment, the regular and periodical visits of the physician should be made as nearly as possible at the hour when they may be reasonably expected by the patient.

SEC. 5. Ordinarily, the physician should not be forward to make gloomy prognostications, but should not fail, on proper occasions, to give timely notice of dangerous manifestations to the friends of the patient, and even to the patient, if absolutely necessary. This notice, however, is at times so peculiarly alarming when given by the physician that its deliverance may often be preferably assigned to another person of good judgment.

SEC. 6. The physician should be a minister of hope and comfort to the sick, since life may be lengthened or shortened not only by the acts but by the words or manners of the physician, whose solemn duty it is to avoid all utterances and actions having a tendency to discourage and depress the patient.

SEC. 7. The medical attendant ought not to abandon a patient because deemed incurable, for continued attention may be highly useful to the sufferer and comforting to the relatives, even in the last period of the fatal malady by alleviating pain and by soothing mental anguish.

SEC. 8. The opportunity which a physician has of promoting and strengthening the good resolutions of patients suffering under the consequences of evil conduct ought never to be neglected. Good counsels, or even remonstrances, will give satisfaction, not offense, if they be tactfully proffered and evince a genuine love of virtue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

CHAPTER II.—THE DUTIES OF PHYSICIANS TO EACH OTHER AND TO THE PROFESSION AT LARGE.

ARTICLE I.—DUTIES FOR THE SUPPORT OF THE PROFESSIONAL CHARACTER.

SECTION 1.—Every one on entering the profession, and thereby becoming entitled to full professional fellowship, incurs an obligation to uphold its dignity and honor, to exalt its standing and to extend the bounds of its usefulness. It is inconsistent with the principles of medical science and it is incompatible with honorable standing in the profession for physicians to designate their practice as based on an exclusive dogma or a sectarian system of medicine.

SEC. 2. The physician should observe strictly such laws as are instituted for the government of the members of the profession; should honor the fraternity as a body; should endeavor to promote the science and art of medicine, and should entertain a due respect for those seniors who, by their labors, have contributed to its advancement.

SEC. 3. Every physician should identify himself with the organized body of his profession as represented in the community in which he resides. The organization of local or county medical societies, where they do not exist, should be effected, so far as practicable. Such county societies, constituting as they do the chief element of strength in the organization of the profession, should have the active support of their members, and should be made instruments for the cultivation of fellowship, for the exchange of professional experience, for the advancement of

medical knowledge, for the maintenance of ethical standards, and for the promotion in general of the interests of the profession and the welfare of the public.

SEC. 4. All county medical societies thus organized ought to place themselves in affiliation with their respective State associations, and these, in turn, with the American Medical Association.

SEC. 5. There is no profession from the members of which greater purity of character and a higher standard of moral excellence are required than the medical; and to attain such eminence is a duty every physician owes alike to the profession and to patients. It is due to the patients, as without it their respect and confidence can not be commanded, and to the profession because no scientific attainments can compensate for the want of correct moral principles.

SEC. 6. It is incumbent on physicians to be temperate in all things, for the practice of medicine requires the unremitting exercise of a clear and vigorous understanding; and in emergencies—for which no physician should be unprepared—a steady hand, an acute eye and an unclouded mind are essential to the welfare and even to the life of a human being.

SEC. 7. It is incompatible with honorable standing in the profession to resort to public advertisements or private cards inviting the attention of the persons affected with particular disease; to promise radical cures; to publish cases or operations in the daily prints, or to suffer such publications to be made; to invite laymen (other than relatives who may desire to be at hand) to be present at operations; to boast of cures and remedies; to adduce certificates of skill and success, or to employ any of the other methods of charlatans.

SEC. 8. It is equally derogatory to professional character for physicians to hold patents for any surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances; to assist unqualified persons to evade the legal restrictions governing the practice of medicine; or to dispense or promote the use of secret medicines, for if such nostrums are of real efficacy, any concealment regarding them is inconsistent with beneficence and professional liberality, and if mystery alone gives them public notoriety, such craft implies either disgraceful ignorance or fraudulent avarice. It is highly reprehensible for physicians to give certificates attesting the efficacy of secret medicines, or other substances used therapeutically.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER.

SECTION 1. Physicians should not, as a general rule, undertake the treatment of themselves, nor of members of their family. In such circumstances they are peculiarly dependent on each other; therefore, kind offices and professional aid should always be cheerfully and gratuitously afforded. These visits ought not, however, to be obtrusively made, as they may give rise to embarrassment or interfere with that free choice on which such confidence depends.

SEC. 2. All practicing physicians and their immediate family dependents are entitled to the gratuitous services of any one or more of the physicians residing near them.

SEC. 3. When a physician is summoned from a distance to the bedside of a colleague in easy financial circumstances, a compensation proportionate to traveling expenses and to the pecuniary loss entailed by absence from the accustomed field of professional labor, should be made by the patient or relatives.

SEC. 4. When more than one physician is attending another, one of the number should take charge of the case, otherwise the concert of thought and action so essential to wise treatment cannot be assured.

SEC. 5. The affairs of life, the pursuit of health, and the various accidents and contingencies to which a physician is peculiarly exposed, sometimes requires the temporary withdrawal of this physician from daily professional labor and the appointment of a colleague to act for a specified time. The colleague's compliance is an act of courtesy which should always be performed with the utmost consideration for the interest and character of the family physician.

ARTICLE III.—THE DUTIES OF PHYSICIANS IN REGARD TO CONSULTATIONS.

SECTION 1. The broadest dictates of humanity should be obeyed by physicians whenever and wherever their services are needed to meet the emergencies of disease or accident.

SEC. 2. Consultations should be promoted in difficult cases, as they contribute to confidence and more enlarged views of practice.

SEC. 3. The utmost punctuality should be observed in the visits of physicians when they are to hold consultations, and this is generally practicable, for society has been so considerate as to allow the plea of a professional engagement to take precedence over all others.

SEC. 4. As professional engagements may sometimes cause delay in attendance, the physician who first arrives should wait for a reasonable time, after which the consultation should be considered as postponed to a new appointment.

SEC. 5. In consultations no insincerity, rivalry or envy should be indulged in; candor, probity and all due respect should be observed toward the physician in charge of the case.

SEC. 6. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending, or by their common consent; and no opinions or prognostications should be delivered which were not the result of previous deliberation and concurrence.

SEC. 7. No decision should restrain the attending physician from making such consequent variations in the mode of treatment as any unexpected change in the character of the case may demand. But at the next consultation reasons for the variations should be stated. The same privilege, with its obligation, belongs to the consultant when sent for in an emergency during the absence of the family physician.

SEC. 8. The attending physician at any time may prescribe for the patient; not so the consultant, when alone, except in a case of emergency or when called from a considerable distance. In the first instance the consultant should do what is needed, and in the second should do no more than make an examination of the patient, and leave a written opinion, under seal, to be delivered to the attending physician.

SEC. 9. All decisions in consultation should be held as confidential. Neither by words nor by manner should any of the participants in a consultation assert or intimate that any part of the treatment pursued did not receive his assent.

SEC. 10. It may happen that two physicians cannot agree in their views of the nature of a case and of the treatment to be pursued. In the event of such disagreement a third physician should, if practicable, be called in. None but the rarest and most exceptional circumstances would justify the consultant in taking charge of the case. He should not do so merely on the solicitation of the patient or friends.

SEC. 11. A physician who is called in consultation should observe the most honorable and scrupulous regard for the character and standing of the attending physician, whose conduct of the case should be justified as far as can be, consistently with the conscientious regard for truth, and no hint or insinuation should be thrown out which could impair the confidence reposed in the attending physician.

ARTICLE IV.—DUTIES OF PHYSICIANS IN CASES OF INTERFERENCE.

SECTION 1. Medicine being a liberal profession those admitted to its ranks should found their expectations of practice especially on the character and the extent of their medical education.

SEC. 2. The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder, nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician.

SEC. 3. The same circumspection should be observed when, from motives of business or friendship, a physician is prompted to visit a person who is under the direction of another physician. Indeed, such visits should be avoided, except under peculiar circumstances; and when they are made, no inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

SEC. 4. A physician ought not to take charge of, or prescribe for, a patient who has recently been under the care of another physician, in the same illness, except in case of a sudden emergency or in consultation with the physician previously in attendance, or when that physician has reliquished the case or has been dismissed in due form.

SEC. 5. The physician acting in conformity with the preceding section should not make damaging insinuations regarding the practice pre-

viously adopted, and, indeed, should justify it if consistent with truth and probity; for it often happens that patients become dissatisfied when they are not immediately relieved, and, as many diseases are naturally protracted, the seeming want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

SEC. 6. When a physician is called to an urgent case, because the family attendant is not at hand, unless assistance in consultation is desired, the former should resign the care of the patient immediately on the arrival of the family physician.

SEC. 7. It often happens, in cases of sudden illness, and of accidents and injuries, owing to the alarm and anxiety of friends, that several physicians are simultaneously summoned. Under these circumstances, courtesy should assign the patient to the first who arrives, and who, if necessary, may invoke the aid of some of those present. In such a case, however, the acting physician should request that the family physician be called, and should withdraw unless requested to continue in attendance.

SEC. 8. Whenever a physician is called to the patient of another physician during the enforced absence of that physician, the case should be reliquished on the return of the latter.

SEC. 9. A physician, while visiting a sick person in the country, may be asked to see another physician's patient because of a sudden aggravation of the disease. On such an occasion the immediate needs of the patient should be attended to and the case relinquished on the arrival of the attending physician.

SEC. 10. When a physician who has been engaged to attend an obstetric case is absent, and another is sent for, delivery being accomplished during the vicarious attendance, the acting physician is entitled to the professional fee, but must resign the patient on the arrival of the physician first engaged.

ARTICLE V.—DIFFERENCES BETWEEN PHYSICIANS.

SEC. 1. Diversity of opinion and opposition of interest may, in the medical as in other professions, sometimes occasion controversy and even contention. Whenever such unfortunate cases occur and cannot be immediately adjusted, they should be referred to the arbitration of a sufficient number of impartial physicians.

SEC. 2. A peculiar reserve must be maintained by physicians toward the public in regard to some professional questions, and as there exist many points in medical ethics and etiquette through which the feelings of physicians may be painfully assailed in their intercourse, and which cannot be understood or appreciated by general society, neither the subject-matter of their differences nor the adjudication of the arbitrators should be made public.

ARTICLE VI.—COMPENSATION.

SECTION 1. By the members of no profession are eleemosynary services more liberally dispensed than by the medical, but justice requires

that some limits should be placed to their performance. Poverty, mutual professional obligations and certain of the public duties named in sections 1 and 2 of Chapter III, should always be recognized as presenting valid claims for gratuitous services; but neither institutions endowed by the public or by the rich, or by societies for mutual benefit, for life insurance, or for analogous purposes, nor any profession or occupation, can be admitted to possess such privilege.

SEC. 2. It cannot be justly expected of physicians to furnish certificates of inability to serve on juries, or to perform militia duty; to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like, without due compensation. But to persons in indigent circumstances such services should always be cheerfully and freely accorded.

SEC. 3. Some general rules should be adopted by the physicians in every town or district relative to the minimum pecuniary acknowledgement from their patient; and it should be deemed a point of honor to adhere to these rules with as much uniformity as varying circumstances will admit.

SEC. 4. It is derogatory to professional character for physicians to pay or offer to pay commissions to any person whatsoever who may recommend to them patients requiring general or special treatment or surgical operations. It is equally derogatory to professional character of physicians to solicit or to receive such commissions.

CHAPTER III.—THE DUTIES OF THE PROFESSION TO THE PUBLIC.

SECTION I. As good citizens it is the duty of physicians to be very vigilant for the welfare of the community, and to bear their part in sustaining its laws, institutions and burdens; especially should they be ready to co-operate with the proper authorities in the administration and in the observance of sanitary laws and regulations, and they should also be ever ready to give counsel to the public in relation to subjects especially appertaining to their profession, as on questions of sanitary police, public hygiene and legal medicine.

SEC. 2. It is the province of physicians to enlighten the public in regard to quarantine regulations; to the location, arrangement and dietaries of hospitals, asylums, schools, prisons, and similar institutions; in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger, and to continue their labors for the alleviation of the suffering people even at the risk of their own lives.

SEC. 3. Physicians, when called on by legally constituted authorities should always be ready to enlighten inquests and courts of justice on subjects strictly medical, such as involve questions relating to sanity, legitimacy, murder by poison or other violent means, and various other subjects embraced in the science of medical jurisprudence. It is but just, however, for them to expect due compensation for their services.

SEC. 4. It is the duty of physicians, who are frequent witnesses of the great wrongs committed by charlatans, and of the injury to health and even destruction of life caused by the use of their treatment, to enlighten the public on these subjects, and to make known the injuries sustained by the unwary from the devices and pretensions of artful impostors.

SEC. 5. It is the duty of physicians to ecognize and by legitimate patronage to promote the profession of pharmacy, on the skill and proficiency of which depends the reliability of remedies, but any pharmacist who, although educated in his own profession is not a qualified physician, and who assumes to prescribe for the sick, ought not to receive such countenance and support. Any druggist or pharmacist who dispenses deteriorated or sophisticated drugs, or who substitutes one remedy for another designated in a prescription, ought thereby to forfeit the recognition and influence of physicians.

CONSTITUTION AND BY-LAWS

FOR

COUNTY MEDICAL SOCIETIES.

(Approved by the Medical Society of the State of North Carolina at the Annual Session in Hot Springs, N. C., June 2, 1903.)

See page 35, Transactions 1903.

Introductory.

The Committee on Organization of the American Medical Association, which was continued at the Saratoga meeting, herewith submits a tentative Constitution and By-Laws for County Societies, and in doing so desires to say, that while the provisions it contains are deemed essential to good organization, some of the provisions are suggestive and educational in character and may not be applicable to every county or section. In such cases these may be omitted, or others more appropriate substituted for them. In any event, the high ideals for the individual physician, and the spirit of courtesy and kindness which should govern him in his dealings with his professional neighbors, are here set forth for thought and consideration.

The committee is not a unit as to whether there should be charged an admission fee as called for in section 1, chapter V, of the By-Laws, but the majority of the committee believes that this is the correct principle for the average individual does not appreciate that which he gets for nothing, and furthermore that if an admission fee is charged the individual will not be as likely to drop out of the Society as if he obtained his membership for nothing. The committee advises, however, that in organizing a county society, or before adopting the new constitution, that the charter shall be open for all in the county who are eligible and admit such charter members without the admission fee.

We close this report by making a quotation from our report when we submitted the Constitution and By-Laws for State societies:

Much in the By-Laws submitted may be regarded as "preaching," but it is insertedly advisedly, with the sole object of arousing in the minds of each medical society member a desire for the accomplishment of greater ends than has been permitted by the customs and forms of the past. The committee earnestly desires that the State committees will continue the work of perfecting organization, actuated by that love for our profession and its ideals demand. With the medical profession well organ-

ized, medical science will more rapidly step to its appointed high place, and the profession which lives in its atmosphere will have that power and respect in the community that is its right.

J. N. McCormack, Bowling Green, Ky.,
P. Maxwell Foshay, Cleveland, Ohio,
George H. Simmons, Chicago, Illinois,
Committee of the American Medical Association.

The Constitution and By-Laws for county societies is merely suggestive and may be amended or altered to meet local conditions, such alterations being, of course, in harmony with the general plan of organization of the State Society.

J. Howell Way,
M. H. Fletcher,
Geo. W. Presley,
J. A. Burroughs,
H. A. Royster,
Committee of the Medical Society of the State of North Carolina.

Constitution.

ARTICLE I.—Name and Title of the Society.

The name and title of this organization shall be the ..... County Medical Society.

ARTICLE II.—Purposes of the Society.

The purposes of this Society shall be to bring into one organization the physicians of ..... county; so that by frequent meetings and full and frank interchange of views they may secure intelligent unity and harmony in every phase of their labor as will elevate and make effective the opinions of the profession in all scientific, legislative, public health, material and social affairs, to the end that the profession may receive that respect and support within its own ranks and from the community to which its honorable history and great achievements entitle it; and with other county societies to form the Medical Society of the State of North Carolina, and through it with other State associations, to form and maintain the American Medical Association.

ARTICLE III.—Eligibility.

Every legally registered physician residing and practicing in ..... county, who is of good moral and professional standing and who does not practice or claim to practice sectarian medicine, shall be eligible for membership.

ARTICLE IV.—Meetings.

Regular meetings shall be held at such time and place as may be determined by the Society. Special meetings may be called by the President on a written request of five members. Calls for special meetings

shall state the object of such meetings, and no business except that stated in the call shall be transacted at such meeting.

ARTICLE V.

The officers of this Society shall consist of a President, Vice-President, Secretary, Treasurer, Delegates, and Board of (three) Censors. These officers, except the Delegates and Board of Censors, shall be elected annually for a term of one year. Delegates shall be elected for two years, or in accordance with the Constitution and By-Laws of the State Association. One member of the Board of Censors shall be elected each year to serve for three years, provided that at the first election after the adoption of this Constitution one member of the board shall be elected for one, one for two, and one for three years.

ARTICLE VI.—Funds and Expenses.

Funds for meeting the expenses of the Society shall be raised by admission fee, annual dues, special assessments and voluntary contributions. Funds may be appropriated by vote of the Society for such purposes as will promote its welfare and that of the profession.

ARTICLE VII.—Charter.

The Society shall apply to the State Society for a charter at the meeting at which this Constitution and By-Laws are adopted, or as soon thereafter as practicable, and the charter shall be kept in the custody of the Secretary.

ARTICLE VIII.—Incorporation.

The Society shall have authority to appoint a Board of Trustees and to provide for articles of incorporation whenever it may deem the same necessary.

ARTICLE IX.—Amendments.

The Society may amend any article of this Constitution by a two-thirds vote of its members at any regular meeting, provided that such amendment shall have been read in open session at a previous regular meeting, and shall have been sent by mail to each member ten days in advance of the meeting at which final action is to be taken.

By-Laws.

CHAPTER I.—Membership.

Section 1. The Society shall judge of the qualification of its members, but as it is the only door to the State Medical Society and to the American Medical Association for physicians within its jurisdiction, every reputable and legally qualified physician in ..... county, who does not practice or claim to practice sectarian medicine, shall be entitled to membership.

SEC. 2. A candidate for membership shall make application in writing, and shall state his age, his college and date of graduation, the places in which he has practiced, and the date of registration in this State. The application must be accompanied by the admission fee, and must be endorsed by two members of this Society. It shall be referred to the Board of Censors, who shall inquire into the standing of the applicant, assure themselves that he or she is duly registered according to the laws of the State, and report at the next regular meeting of this Society. Election shall be by ballot, and two-thirds of the votes of the members present and voting shall be necessary to elect. The application shall be returned to the Secretary, who shall file it for future reference. Applications for membership from rejected candidates shall not be received within six months of such rejection.

SEC. 3. A physician accompanying his application with a transfer card from another component county society of this or any State within sixty days of the issuance of said card, may be admitted without fee on a majority vote of the members present, and without the application being referred to the Board of Censors. Such applications may be acted on at the meeting at which they are presented on the vote of three-fourths of the members present, otherwise they shall lie over until the next regular meeting. No annual dues for the current year shall be charged against such members, provided the same have been paid to the Society from which the applicant comes.

SEC. 4. A physician residing in an immediately adjoining county may become a member of this Society in like manner and on the same terms as a physician living in this county, on permission of the county society of the county in which the applicant lives, if there be one, or of the State Councilor for this jurisdiction.

SEC. 5. A member in good standing who is free from all indebtedness to this Society, and against whom no charges are pending, wishing to withdraw, shall be granted a transfer card. This card shall state the date the member associated himself with this Society, the date of issuance of the card, and shall be signed by the President and Secretary. It shall be accompanied with a copy of the application presented at the time the member joined the Society, for information to the society to which the member desires to attach himself.

SEC. 6. All members shall be equally privileged to attend all meetings and take part in all proceedings, and shall be eligible to any office of honor within the gift of the Society, so long as they conform to this Constitution and By-Laws, including the payment of the dues to this Society and to the State Society: *Provided*, that no member under sentence of expulsion shall take part in any of the proceedings, or be eligible to any office until relieved of such disability. And provided further, that none of the privileges of membership shall be extended to any person not a member of this Society, except on a majority vote of the Society in regular meeting.

Sec. 7. A member who is guilty of a criminal offence or gross misconduct, either as a physician or as citizen, or who violates any of the provisions of this Constitution and By-Laws, shall be liable to censure suspension or expulsion. Charges against a member must be made in writing and be delivered to the Secretary, who shall immediately furnish a copy to the accused and to the chairman of the Board of Censors. The Board of Censors shall investigate the charges on their merits, but no action shall be taken by the Board before giving the accused and accusers ample opportunity to be heard. Nor shall any action be taken by the Board within ten days of the presentation of the charges to the accused. The Board shall report (1) that the charges are not sustained; or (2) that the charges are sustained, and that the accused be (*a*) censured; (*b*) suspended for a definite time, or (*c*) expelled. Censure or suspension shall require a two-thirds vote of the members present and voting, and a three-fourths vote of those preent and voting shall be required to expel a member. No action shall be taken by the Society in such cases until at least six weeks have elapsed since the filing of the charges. A member suspended for a definite time shall be reinstated at the expiration of the time, without action on his part or on the part of the Society.

Sec. 8. Kindly efforts in the interest of peace, conciliation or reformation, so far as possible and expedient, shall precede the filing of formal charges affecting the character or standing of a member, and the accused shall have opportunity to be heard in his own defence in all trials and proceedings of this nature.

Sec. 9. Members expelled from this Society for any cause shall be eligible for membership after one year from date of expulsion, and on the same terms and in like manner as original applicants.

CHAPTER II.—Powers and Duties.

Section 1. This Society shall have general direction of the affairs of the medical profession of the county, and its influence shall be constantly exerted to better the scientific, material and social condition of every physician within its jurisdiction. Systematic efforts shall be made by each member, and by the Society as a whole, to increase the membership until it embraces every reputable physician in the county.

Sec. 2. A meeting shall be held at .... p. m. on the ..... in each month (or oftener). ..... members shall constitute a quorum. The officers and committee on program shall profit by experience and by the example of other similar societies, and strive to arrange for the most attractive and successful proceedings for each meeting. Younger members especially shall be encouraged to do post-graduate and original research work, and to give this Society the first results of such labors. Crisp papers and discussions and reports of cases shall be arranged for and encouraged, and tedious and profitless proceedings and discussions shall be avoided as far as practicable.

SEC. 3. One meeting during each year may be set apart for a discussion of the business affairs of the profession of the county, with the view of adopting the best methods for the guidance of all. In all proper ways the public shall be taught business methods and prompt collections are essential to the equipment of the modern physician and surgeon, and that it suffers even more than the profession when this is not recognized.

SEC. 5. The Society shall endeavor to educate its members to the belief that the physician should be a leader in his community, in character, in learning, in dignified and manly bearing, and in courteous and open treatment of his brother physicians, to the end that the profession may occupy that place in its own and the public estimation to which it is entitled.

CHAPTER III.—OFFICERS.

SECTION 1. The officers of the Society shall be elected at the (December) meeting in each year, which shall be known as the annual meeting. Nominations shall be made by informal ballot, and all elections shall be by ballot. The vote of a majority of all the members present shall be necessary to an election.

SEC. 2. The President shall preside at all meetings of the Society, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession in the county during the year, and it shall be his pride and ambition to leave it in better condition as regards both scientific attainments and harmony than at the beginning of his term of office.

SEC. 3. The Vice-President shall assist the President in the performance of his duties, shall preside in his absence, and, on his death, resignation or removal from the county, shall succeed to the presidency.

SEC. 4. The Secretary shall record the minutes of the meetings and receive and care for all records and papers belonging to the Society, including its charter. He shall keep account of and promptly turn over to the Treasurer all funds of the Society which may come into his hands. He shall make and keep a correct list of the members of the Society in good standing, noting of each his correct name, address, place and date of graduation, and the date of the certificate entitling him to practice medicine; and in a separate list he shall note the same facts in regard to each legally qualified physician in this county not a member of this Society. It shall be his duty to send a copy of such lists, on blank forms furnished him for that purpose, to the Secretary of the State Society, at such time as may be designated by the State Society. In making such lists, he shall endeavor to account for each physician who has moved into or out of the county during the year, stating, when possible, both his present and past address. At the same time, and with his report of such lists of members and physicians, he shall transmit to the State Society his order on the Treasurer for the annual dues of the Society.

SEC. 5. The Treasurer shall receive all dues and money belonging to

the Society from the hands of the Secretary or members, and shall pay out the same only on the written order of the Secretary.

SEC. 6. The delegates shall attend and faithfully represent the members of this Society and the profession of this county in the House of Delegates of the State Society, and shall make a report of the proceedings of that body to this Society at the earliest opportunity.

CHAPTER IV.—COMMITTEES.

SECTION 1. There shall be a Board of Censors as provided in the Constitution, a standing Committee on Programs and Scientific Work, a Committee on Public Health and Legislation, and such special committees as may from time to time be deemed necessary.

SEC. 2. *Board of Censors.*—This Board, consisting of three members, one elected annually, shall examine and report on the qualification of applicants for membership, subjecting each applicant to such examination as it may deem necessary. It shall investigate charges preferred against a member, and report its conclusions and recommendations to the Society. In case of the absence of a member of the Board, the President may appoint some member to fill the vacancy. Th senior member of the Board in point of service shall be chairman of the Board.

SEC. 3. *Committee on Program and Scientific Work.*—This committee shall consist of the President, Vice-President, and Secretary. It shall be its duty to promote the scientific and social functions of the Society by arranging attractive programs for each meeting, and by urging each member to take part in the scientific work. It shall stimulate fraternalism and good feeling among the members in every way possible.

SEC. 4. *Committee on Public Health and Legislation.*—This committee shall consist of three members, who shall be appointed annually by the President. It shall be its duty to enforce and support the sanitary and medical laws of the State in this county, to co-operate with the legislative committee of the State Society in all matters pertaining to legislation, and to prosecute quacks and medical pretenders in this county.

CHAPTER V.—FUNDS AND EXPENSES.

SEC. 1. The admission fee, which must accompany the application, shall be $5.00, and shall include the annual dues for the fiscal year, provided that when more than one-half of the fiscal year has elapsed at the time of election of a member, one-half of the annual dues shall be remitted, making the admission fee in such cases $4.00. The admission fee shall be returned if the applicant is not accepted.

SEC. 2. The annual dues shall be $2.00, and shall be payable on January 1st of each year. Any member who shall fail to pay his annual dues by April 1st shall be held as suspended without action on the part of the Society. A member suspended for non-payment of dues shall be restored to full membership on payment of all indebtedness. Members more than one year in arrears shall be dropped from the roll of members

SEC. 3. The fiscal year of this Society shall be from January to December, inclusive.

CHAPTER VI.—ORDER OF BUSINESS.

The order of business shall be as follows:

1. Call to order by the President.
2. Reading of minutes of last meeting.
3. Clinical cases.
4. Papers and discussions.
5. Unfinished business.
6. Miscellaneous business.
7. Announcements.
8. Adjournment.

CHAPTER VII.—RULES OF ORDER.

The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts's Rules of Order, unless otherwise determined by vote.

CHAPTER VIII.—PRINCIPLES OF ETHICS.

The Principles of Ethics of the American Medical Association and of the Medical Society of the State of North Carolina shall be the Code of this Society.

CHAPTER IX.—AMENDMENTS.

These By-Laws may be amended at any regular meeting by a two-thirds vote thereof, provided that such amendment has been read in open session at the preceeding regular meeting, and a copy of the same has been sent to each member by the Secretary ten days in advance of the meeting at which final action is to be taken.

Alphabetical List of Members of the Medical Society of the State of North Carolina, with County in which Local Membership and Residence is Located.

Name.	*County.*
Anderson, C. A.	Alamance
Ashe, E. S.	Anson
Ambler, Chase P.	Buncombe
Archer, I. J.	Buncombe
Anderson, Paul V.	Burke
Anderson, Jas. R.	Burke
Archey, L. M.	Cabarrus
Adams, L. C.	Carteret
Abernethy, H. L.	Catawba
Abernethy, W. L.	Catawba
Abernethy, J. F.	Cherokee
Aydlette, J. P.	Cleveland
Averitt, K. G.	Cumberland
Anderson, Abel	Davidson
Adams, C. A.	Durham
Ashworth, C. A.	Buncombe
Adams, C. E.	Gaston
Anders, McT. G.	Gaston
Angle, J. B.	Guilford
Armfield, D. A.	Guilford
Arnold, L. J.	Harnett
Abel, J. F.	Haywood
Allen, R. L.	Haywood
Allen, T. A.	Henderson-Polk
Adams, M. R.	Iredell-Alexander
Anderson, Thos. E.,	Iredell-Alexander
Abernethy, H. N.	Lincoln
Ashworth, B. L.	McDowell
Abernethy, J. S.	Mecklenburg
Alexander, J. R.	Mecklenburg
Alexander, Annie L.,	Mecklenburg
Alexander, H. Q.	Mecklenburg
Austin, J. A.	Mecklenburg
Achorn, J. A.	Moore
Asbury, F. E.	Montgomery
Anders, W. K.	New Hanover
Akerman, Joseph	New Hanover
Abernethy, E. A.	Orange
Attmore, Geo. S.	Pamlico
Aydlette, H. T.,	Pasquotank-Camden-Dare
Alexander, L. L.	Pender
Atkins, G. J.	Rowan
Andrews, R. M.	Rutherford
Allen, Joseph A.	Stanly
Anderson, J. N.	Stanly

Name.	*County.*
Allred, E. W.	Surry
Ashby, Thos. B.	Surry
Armfield, R.	Union
Ashcraft, J. E.	Union
Alston, B. P.	Vance
Alston, Willis	Warren
Alston, Willis, Jr.,	Warren
Abernethy, C. O.	Wake
Aaron, L. P.	Wayne
Anderson, Albert	Wake
Anderson, W. H.	Wilson
Anderson, W. S.	Wilson
Austin, W. M.	Yancey
Barrett, W. W.	Anson
Beckwith, R. B.	Robeson
Bennett, J. H.	Anson
Ballou, J. L.	Ashe
Barton, J. H.	Ashe
Blevins, Manly	Ashe
Blount, W. A.	Beaufort
Blount, J. G.	Beaufort
Bonner, H. M.	Beaufort
Brown, Ed. M.	Beaufort
Bullock, W. J.	Beaufort
Battle, S. W.	Buncombe
Briggs, H. H.	Buncombe
Brookshire, H. G.	Buncombe
Brown, Thos. E. W.	Buncombe
Brownson, W. C.	Buncombe
Burroughs, Jas. A.	Buncombe
Barrier, P. A.	Cabarrus
Black, J. C.	Cabarrus
Burleyson, L. N.	Cabarrus
Bonner, K. P. B.	Carteret
Badgett, J. F.	Caswell
Baker, R. B.	Catawba
Burns, Wm.	Chatham
Blake, J. F.	Columbus
Boyce, J. M.	Columbus
Bullock, T. C.	Cumberland
Beall, J. F.	Davidson
Bird, Joseph	Davidson
Bowers, A. H.	Davidson
Buchanan, E. J.	Davidson
Byerly, A. B.	Davie
Boddie, N. P.	Durham

Name.	*County.*
Baker, J. M.	Edgecombe
Brothers, E. J.	Edgecombe
Bahnson, H. T.	Forsyth
Bynum, John	Forsyth
Bynum, Wade H.	Forsyth
Burt, S. P.	Franklin
Boyette, E. C.	Gaston
Bunting, R. C.	Gaston
Brooks, G. C.	Gates
Brock, G. [illegible]	Graham
Booth, S. D.	Granville
Booth, T. L.	Granville
Banner, C. W.	Guilford
Battle, J. T. J.	Guilford
Beall, W. P.	Guilford
Beall, Louis G.	Guilford
Boyles, J. H.	Guilford
Bowman, H. P.	Guilford
Broadnax, J. G.	Guilford
Brooks, J. E.	Guilford
Brooks, E. Z.	Guilford
Burrus, John T.	Guilford
Burbage, T. J.	Hertford
Bell, A. E.	Iredell-Alexander
Burgin, H. F.	Jackson
Beam, J. L.	Lincoln
Browner, J. A.	Macon-Clay
Baird, J. H.	Madison
Burnett, I. E.	Madison
Brevard, R. J.	Mecklenburg
Bruner, J.	Mecklenburg
Blair, A. M.	Moore
Bowman, H. E.	Montgomery
Battle, Jas. P.	Nash
Brantley, C. H.	Nash
Brantley, Hassell	Nash
Bell, Chas. D.	New Hanover
Bellamy, W. J. H.	New Hanover
Bellamy, R. H.	New Hanover
Bauseman, C. H.	New Hanover
Bullock, D. W.	New Hanover
Burbank, T. S.	New Hanover
Belton, Mahlen	Northampton
Blount, F. H.	Onslow
Bradford, R. H.	Pender
Baynes, R. S.	Person
Boyles, A. C.	Person
Bradsher, W. A.	Person
Brown, Zene	Pitt
Basnight, T. G.	Pitt
Brown, G. W.	Richmond
Brown, J. P.	Robeson
Baird, C. A.	Rockingham
Balsley, T. E.	Rockingham
Boaz, T. A.	Rockingham
Brooks, E. H.	Rockingham
Brawley, R. V.	Rowan
Brown, J. Stevens	Rowan
Bloomfield, W. A.	Moore
Brown, Geo. A.	Rowan
Busby, J. G.	Rowan
Bostic, W. C.	Rutherford
Blue, K. A.	Scotland
Bennett, A. M.	Swain
Brooks, Whitfield	Transylvania
Blair, J. M.	Union
Bass, H. H.	Vance
Browning, B. Ray	Warren
Battle, K. P., Jr.	Wake
Banks, T. L.	Wake
Bell, G. M.	Wake
Blalock, N. M.	Wake
Boone, W. H.	Wake
Buffalo, J. S.	Wake
Burt, B. W.	Wake
Benton, Geo. R.	Wayne
Billings, Arthur E.	Wilkes
Bryant, C. G.	Wilkes
Barnes, B. F.	Wilson
Blackwell, T. L.	Yadkin
Carpenter, S. B.	Anson
Covington, J. M.	Anson
Covington, J. M., Jr.	Anson
Call, T. J.	Ashe
Colvard, J. W.	Ashe
Capehart, A.	Bertie
Clark, Geo. L.	Bladen
Cromartie, R. S.	Bladen
Curtis, W. G.	Brunswick
Calloway, A. W.	Buncombe
Carraway, J. F.	Buncombe
Cheeseborough, Thos. P.,	Buncombe
Clemenger, F. J.	Buncombe
Clentz, W. J.	Buncombe
Cotten, Clyde E.	Buncombe
Carroll, J. L.	Buncombe
Carroll, R. S.	Buncombe
Cocke, Jere	Buncombe
Caldwell, D. G.	Cabarrus
Caldwell, M. M.	Cabarrus
Carter, G. H.	Caldwell
Corpening, Oscar J.	Caldwell
Chapin, A. B.	Carteret
Clarke, F. M.	Carteret
Campbell, Jas. R.	Catawba
Childs, J. A.	Catawba
Chapin, H. T.	Chatham
Casteel, L. R.	Cherokee
Champion, C. O.	Cleveland

Name.	*County.*
Caton, Geo. A.	Craven
Cathell, J. [illegible]	Davidson
Clodfelter, Chas. M.	Davidson
Carroll, J. W.	Duplin
Carr, John R.	Durham
Cheatham, Arch	Durham
Carr, J. B.	Edgecombe
Copple, T. M.	Forsyth
Clark, K. M.	Franklin
Corbell, E. F.	Gates
Cannady, S. H.	Granville
Collins, John A.	Halifax
Campbell, Archibald,	Iredell-Alexander
Cloninger, L. V.,	Iredell-Alexander
Candler, Chas. Z.	Jackson
Candler, J. M.	Jackson
Crowell, L. A.	Lincoln
Chree's, B. A.	McDowell
Craven, W. P.	Mecklenburg
Crowell, A. J.	Mecklenburg
Crowell, S. M.	Mecklenburg
Costner, T. F.	Mecklenburg
Clark, Geo. T.	Mecklenburg
Caviness, A. H.	Moore
Covington, L. C.	Nash
Collier, Geo. K.	New Hanover
Cranmer, J. B.	New Hanover
Coppedge, N. P.	Northampton
Carstarphen, Wm. T.,	Northampton
Cook, I. H.	Northampton
Cox, E. L.	Onslow
Clark, J. T.	Pamlico
Crowell, W. H.	Pender
Cox, B. T.	Pitt
Croom, A. B.	Robeson
Croom, J. D.	Robeson
Caldwell, J. A.	Rowan
Chenault, W. F.	Rowan
Council, Jeff. B.	Rowan
Cowan, Robt. L.	Rowan
Crump, W. L.	Rowan
Clement, E. B.	Rowan
Chapman, G. M.	Rutherford
Carpenter, F. A.	
Cooper, F. J.	Sampson
Cooper, G. M.	Sampson
Campbell, J. I.	Stanly
Cooper, J. A.	Swain
Cannon, J. A.	Transylvania
Cheatham, Goode	Transylvania
Coggeshall, G. A.	Granville
Caviness, Z. M.	Wake
Cooke, Fred. K.	Wake
Cotten, A. T.	Wake
Cohen, B. W.	Washington
Cobb, W. H. H.	Wayne
Cobb, W. H., Jr.	Wayne
Crawford, W. B.	Wayne
Carlton, R. L.	Wilkes
Clegg, J. Hall	Stanly
Crocker, Wm. D.	Wilson
Crocker, S. H.	Wilson
Clingman, J. J.	Yadkin
Dunlap, J. M.	Anson
Dixon, W. H.	Beaufort
Desher, J. Arthur	Brunswick
David, J. E.	Buncombe
Dunn, Wm. L.	Buncombe
Davis, Geo.	Carteret
Duncan, C. L.	Carteret
Duffy, Chas.	Craven
Duffy, Frank	Craven
Diuguid, J. A.	Craven
Diuguid, J. W.	Craven
Duffy, Leinster	Craven
Disosway, A. W.	Craven
Dye, Jno. C.	Cumberland
Dorsett, H. W.	Davidson
Dalton, D. N.	Forsyth
Dalton, W. N.	Forsyth
Davis, A. P.	Forsyth
Davis, J. W.	Forsyth
Davis, W. W.	Gaston
Dodson, H. H.	Guilford
Davis, W. C.	Guilford
Denning, O. L.	Harnett
Davis, F. M.	Haywood
Drafts, A. B.	Henderson-Polk
Dixon, Guy E.	Henderson-Polk
Doster, J. L.	McDowell
Davidson, J. E.	Mecklenburg
DeArmond, J. Mc.	Mecklenburg
Daligny, Chas.	Montgomery
Dew, S. P.	Nash
Dudley, G. J.	Onslow
Daniels, O. C.	Pamlico
Dees, D. A.	Pamlico
Davis, J. J.,	Pasquotank-Camden-Dare
Dawson, W. W.	Pitt
Dixon, Joseph	Pitt
Dickson, A. P.	Robeson
Davis, T. W.	Rockingham
Dicks, Jas. F.	Rockingham
Dorsett, E. Rose	Rowan
Dicks, D. E.	Stokes
Davis, Robt. L.	Swain

Name.	*County.*
Dees, W. A.	Union
Dixon-Carroll, E. Delia	Wake
Dickinson, E. T.	Wilson
Evans, L. B.	Bladen
Elias, Lewis W.	Buncombe
Everhart, W. H.	Catawba
Edwards, J. D.	Chatham
Ellis, Robt. C.	Cleveland
Eddleman, H. M.	Gaston
Edwards, G. C.	Greene
Edgerton, J. L.	Henderson-Polk
English, I. L.	Madison
Ellis, A. J.	Northampton
Everett, A. [illegible]	Richmond
Evans, Wm. E.	Robeson
Ellington, Sam	Rockingham
Everington, Geo. D.	Scotland
Ellington, J. H.	Stokes
English, Ed. S.	Transylvania
Eubanks, J. D.	Union
Early, J. W.	Washington
Exum, W. P., Jr	Wayne
Eller, A. J.	Wilkes
Edwards, C. P.	Yancey
Faucett, T. S.	Alamance
Freeman, R. A.	Alamance
Fletcher, M. H.	Buncombe
Flew, J. W.	Cabarrus
Foil, M. A.	Cabarrus
Flowers, B. G.	Caldwell
Flowers, C. E.	Caldwell
Feard, Fred. F.	Catawba
Falls, B. F.	Cleveland
Floyd, A. G.	Columbus
Fitzgerald, J. Y.	Davidson
Faison, Jno. M.	Duplin
Fearington, J. P.	Forsyth
Flynt, S. S.	Forsyth
Floyd, R. P.	Franklin
Fortune, A. F.	Guilford
Fox, M. F.	Guilford
Flagg, P. W.	Guilford
Ferguson, H. B.	Halifax
Fenner, Ed. F.	Halifax
Few, Columbus	Henderson-Polk
Freeman, W. G.	Hertford
Frisbee, J. T.	Madison
Faison, I. W.	Mecklenburg
Ferguson, K. M.	Moore
Fearing, I.,	Pasquotank-Camden-Dare
Fearing, Zenos,	Pasquotank-Camden-Dare
Fearing, C. G.,	Pasquotank-Camden-Dare
Fearing, W. B.,	Pasquotank-Camden-Dare
Fountain, Wm.	Pitt
Fox, D. L.	Randolph
Fox, Thos. I.	Randolph
Fowlkes, J. I.	Richmond
Fitzgerald, J. F.	Rowan
Flippen, J. Meiggs	Rowan
Foust, I. H.	Rowan
Fulp, Elias	Stokes
Flippen, R. E. L.	Surry
Flippen, S. T.	Surry
Folger, W. C.	Surry
Ferrebee, C. G.	Vance
Ferrebee, E. B.	Wake
Fowler, M. L.	Wake
Farthing, L. E.	Watauga
Faison, W. W.	Wayne
Freeman, H. F.	Wilson
Fassett, B. W.	Yadkin
Goley, W. R.	Alamance
Goley, W. R.	Brunswick
Goodman, E. G.	Brunswick
Glenn, E. B.	Buncombe
Gouger, G. J.	Cabarrus
Grier, S. A.	Cabarrus
George, D. S.	Carteret
Graham, Wm. A.	Cherokee
Goode, W. A.	Cleveland
Gold, G. M.	Cleveland
Gregg, W. T.	Cleveland
Gore, D. N.	Columbus
Graham, Geo. A.	Cumberland
Garrington, J. F.	Currituck
Griggs, W. T.	Currituck
Graham, B. R.	Duplin
Graham, Joseph	Durham
Granam, Wm. A.	Durham
Garren, R. H.	Gaston
Garrison, D. A.	Gaston
Glenn, H. F.	Gaston
Glenn, L. N.	Gaston
Gilmer, C. S.	Guilford
Gordon, J. R.	Guilford
Gove, Anna M.	Guilford
Gray, Calborn	Guilford
Grimsley, J. E.	Guilford
Glascock, Joy Harris	Guilford
Green, I. E.	Halifax
Greenwood, B. H.	Haywood
Goelet, E. B.	Henderson-Polk
Grady, Earl	Henderson-Polk

Name.	*County.*
Greenwood, S. E.,	Henderson-Polk
Guerard, Arthur R.,	Henderson-Polk
Grady, J. C.	Johnston
Griffin, J. A.	Johnston
Garren, R. H.	McDowell
Gilbert, W. W.	McDowell
Graham, Joseph	Mecklenburg
Graham, W. A.	Mecklenburg
Graham, Geo. W.	Mecklenburg
Gibbon, John H.	Mecklenburg
Gibbon, Robt. L.	Mecklenburg
Gladmon, Edwin	Moore
Gilmore, W. D.	Moore
Galloway, W. C.	New Hanover
Griggs, J. B.,	Pasquotank-Camden-Dare
Griggs, W. W.,	Pasquotank-Camden-Dare
Grimes, R. J.	Pitt
Garrett, F. J.	Richmond
Gaither, J. B.	Rowan
Goodman, A. B.	Rowan
Gibson, J. S.	Scotland
Gibson, M. R.	Scotland
Garner, H. H.	Transylvania
Gill, R. J.	Vance
Gaines, L. M.	Wake
Goodwin, A. W.	Wake
Ginn, T. L.	Wayne
Gilreath, F. H.	Wilkes
Gibbs, J. B.	Yancey
Hart, J. E.	Anson
Hardy, Ira M.	Beaufort
Hunter, H. H.	Beaufort
Harrell, W. J.	Bertie
Hoggard, Jno. T.	Bertie
Horton, E. H.	Bertie
Harris, I. A.	Buncombe
Hilliard, W. D.	Buncombe
Holmes, L. E.	Buncombe
Hall, Jas. K.	Burke
Hennessee, E. A.	Burke
Headen, W. E.	Carteret
Herman, F. L.	Catawba
Highway, S. C.	Cherokee
Houser, E. A.	Cleveland
Houser, W. H.	Cleveland
Hall, J. Clegg	Columbus
Hammond, A. F.	Craven
Hughes, F. W.	Craven
Haigh, T. D.	Cumberland
Highsmith, Seavy	Cumberland
Highsmith, J. F.	Cumberland
Hill, D. J.	Davidson
Hill, Joel	Davidson
Hill, W. L.	Duplin
Hicks, C. S.	Durham
Hicks, W. N.	Durham
Holt, E. M.	Durham
Holt, W. P.	Durham
Holloway, R. L.	Durham
Harrell, S. N.	Edgecombe
Haines, J. L.	Forsyth
Harris, J. H.	Franklin
Hatch, P. R.	Franklin
Henderson, R. B.	Franklin
Hay, W. S.	Gaston
Hunter, B. R.	Gaston
Hunter, M. C.	Gaston
Howell, S. F.	Graham
Hooper, L. D.	Graham
Hays, Ben. K.	Granville
Hardee, P. R.	Granville
Holloway, O. W.	Granville
Harper, Jas. H.	Greene
Harrison, Edmund	Guilford
Hilton, J. J.	Guilford
Hughes, Geo. H.	Guilford
Holt, W. T.	Guilford
Harrison, A. S.	Halifax
Hoyt, A. C.	Halifax
Harper, M. W.	Harnett
Halford, J. W.	Harnett
Hicks, I. F.	Harnett
Highsmith, Chas.	Harnett
Holt, W. P.	Harnett
Hudson, W. L.	Harnett
Hall, E. A.	Iredell-Alexander
Harrill, L.	Iredell-Alexander
Houck, Albert	Iredell-Alexander
Hooper, Delos D.	Jackson
Hooks, Thel.	Johnston
Hargrove, W. F.	Lenoir
Hodges, J. M.	Lenoir
Hoover, Chas. H.	Lincoln
Hargrove, W. H.	Martin
Hawley, F. O.	Mecklenburg
Henderson, S. M.	Mecklenburg
Herron, A. M.	Mecklenburg
Hunter, L. W.	Mecklenburg
Hunter, Wm. M.	Mecklenburg
Hovis, Leighton	Mecklenburg
Hoyle, Hughes B.	Moore
Harris, A. H.	New Hanover
Harper, Chas. T.	New Hanover
Honnett, J. H.	New Hanover
Hall, Wright	New Hanover
Hester, J. R.	Orange
Hughes, C. M.	Orange

Name.	*County.*
Henly, Sam. A.	Randolph
Hubbard, C. C.	Randolph
Hunter, J. V.	Randolph
Hodgin, H. H.	Robeson
Henderson, A. G.	Rowan
Heathman, J. D.	Rowan
Heilig, H. G.	Rowan
Harris E. B.	Rutherford
Harrell, L. B.	Rutherford
Hamrick, T. G.	Rutherford
Hicks, O.	Rutherford
Hicks, Romeo	Rutherford
Haynes, B. M.	Rutherford
Holiday, R. H.	Sampson
Holmes, F. H.	Sampson
Hamer, A. W.	Scotland
Hartsell, F. E.	Stanly
Hatheock, T. A.	Stanly
Hill, W. I.	Stanly
Hill, L. H.	Stokes
Hollingsworth, Ed. M.	Surry
Hollingsworth, J. M.	Surry
Hollingsworth, R. E.	Surry
Hollingsworth, J. B.	Surry
Holt, Russell D.	Swain
Hunt, C. W.	Transylvania
Hunter, J. V.	Union
Houston, H. C.	Union
Harris, F. R.	Vance
Harris, H. H.	Wake
Hayden, Catherine P.	Wake
Haywood, F. J.	Wake
Haywood, Hubert	Wake
Hines, P. E.	Wake
Hocutt, B. A.	Wake
Holding, S. P.	Wake
Horton, W. C.	Wake
Hassell, J. L.	Washington
Hassell, Stark	Washington
Halsey, B. F.	Washington
Hardison, W. H.	Washington
Hodges, J. M.	Watauga
Hayes, L. O.	Wayne
Hill, Thos.	Wayne
Hamby, C. L.	Wilkes
Horton, W. P.	Wilkes
Herring, B. S.	Wilson
Holcomb, C. M.	Yadkin
Hutchins, E. M.	Yadkin
Harding, T. R.	Yadkin
Hall, J. M.	Yancey
Ivey, W. P.	Caldwell
Irvin, Jno. R.	Mecklenburg
Ingram, C. B.	Montgomery
Jones, A. L.	Ashe
Jones, T. J.	Ashe
Jones, R. W.	Ashe
Jenkins, P. C.	Bertie
Jordan, Chas. S.	Buncombe
Jerome, J. R.	Union
Jones, A. D.	Caldwell
Johnson, J. T.	Catawba
Johnson, Thos. C.	Columbus
Jordan, D. B.	Columbus
Jones, R. DuVal	Craven
Julian, Chas. A.	Davidson
Jones, A. J.	Duplin
Johnson, N. M.	Durham
Jordan, A. C.	Durham
Jewett, M. D.	Forsyth
Jenkins, J. H.	Gaston
Jones, J. W.	Guilford
Jordan, G. E.	Guilford
Jones, W. M. Jr.	Guilford
Justice, J. T.	Forsyth
Jurney, P. C.	Iredell-Alexander
Johnson, Floyd	Johnston
Justice, Jas. F.	Johnston
Jones, Harry M.	Macon-Clay
Justice, M. L.	McDowell
Johnson, Alice E.	Moore
Joyner, T. D.	Northampton
James, F. C.	Pitt
Jones, C. M.	Pitt
Joyner, C. C.	Pitt
Jonas, J. F.	Rutherford
John, Peter	Scotland
Jones, A. G.	Stokes
Jenkins, C. L.	Wake
Johnson, R. W.	Wake
Jones, A. O.	Wake
Jordan, T. M.	Wake
Jordan, W. S.	Cumberland
Judd, J. M.	Wake
Jones, W. J.	Wayne
Kerr, J. Edwin	Anson
Kellum, Wm. D.	Beaufort
King, R. M.	Cabarrus
Kent, A. A.	Caldwell
Kirkman, T. A.	Chatham
Killebrew, C. B.	Edgecombe
Kapp, H. H.	Forsyth
Kernodle, G. W.	Guilford
Knight, W. P.	Guilford
Kirkpatrick, Wm. L.	Haywood
Kirk, Wm. R.	Henderson-Polk
King, J. E.	Iredell-Alexander
Klutz, E. E.	Iredell-Alexander
Killiam, R. B.	Lincoln

Name.	*County.*
Kiser, W. C.	Lincoln
Knight, J. B.	Martin
Kirby, Guy S.	McDowell
King, Parks M.	Mecklenburg
Knox, John	Mecklenburg
Keerans, L. C.	Mecklenburg
Koonce, S. E.	New Hanover
Kinsman, H. F.	Richmond
Kirkpatrick, L. R.	Robeson
Kerr, C. S.	Sampson
King, O. D.	Stanly
King, M. M.	Transylvania
Knox, A. W.	Wake
Kennedy, J. B.	Wayne
Kornegay, L. W.	Wayne
Long, Geo. W.	Alamance
Lemly, S. T.	Ashe
Lucas, W. H. G.	Bladen
Laird, E. C.	Buncombe
Lee, P. H.	Buncombe
Lafferty, J. S.	Cabarrus
Lilly, W. H.	Cabarrus
Love, B. E.	Caswell
Little, Q. M.	Catawba
Long, Fred. Y.	Catawba
Long, T. W.	Catawba
Lattimore, E. B.	Cleveland
Lee, L. V.	Cleveland
Lane, Jno. L.	Duplin
Linville, A. Y.	Forsyth
Lockett, E. A.	Forsyth
Lott, H. S.	Forsyth
Lee, W. C. P.	Gates
Ledbetter, A. E.	Guilford
Little, Thos. R.	Guilford
Long, John W.	Guilford
Logan, Jno. E.	Guilford
Leggett, K.	Halifax
Lee, S. P. J.	Harnett
Long, H. F.	Iredell-Alexander
Lassiter, D. B.	Johnston
Lapham, Mary E.	Macon-Clay
Lyle, S. H.	Macon-Clay
Long, B. L.	Martin
Littlejohn, R. N.	Mecklenburg
Lafferty, R. S.	Mecklenburg
Luper, D. H.	Mecklenburg
Laster, J. D.	Moore
Love, L. H.	New Hanover
Lamb, R. B.,	Pasquotank-Camden-Dare
Lumsden, W. J.,	Pasquotank-Camden-Dare
Lucas, Geo. F.	Perquimans
Laughinghouse, Chas. O'H.	Pitt
Lewis, C. H.	Randolph
Ledbetter, J. M.	Richmond
Lovelace, T. B.	Rutherford
Lee, A. M.	Sampson
Lee, R. E.	Sampson
Lilly, J. M.	Stanly
Leak, J. J.	Stokes
Lyda, A. E.	Transylvania
Lyda, W. M.	Transylvania
Lewis, R. H.	Wake
Lane, W. K.	Wayne
Lamm, I. W.	Wilson
Leak, W. G.	Yadkin
Montgomery, H. M.	Alamance
Moore, H. R.	Alamance
Meisenheimer, T. F.	Anson
Mariner, N. C.	Beaufort
Mitchell, Wayland	Bertie
Moore, Tilon V.	Brunswick
Merriwether, F. T.	Buncombe
Merrimon, Louise A.	Buncombe
Minor, C. L.	Buncombe
Morris, E. R.	Buncombe
Murphy, P. L.	Burke
Mattocks, C. J.	Caldwell
Malloy, S. A.	Caswell
Menzies, H. C.	Catawba
Moser, D. M.	Catawba
Mitchell, W. F.	Cleveland
Morrison, Rufus R.	Cleveland
Maxwell, H. B.	Columbus
Marsh, J. H.	Cumberland
Mann, S. M.	Currituck
Mack, J. H.	Davidson
Myers, J. A.	Davidson
Martin, W. C.	Davie
Murphy, J. G.	Duplin
Mann, T. A.	Durham
Manning, J. M.	Durham
Moore, R. A.	Durham
Mercer, W. P.	Edgecombe
Malone, J. E.	Franklin
Mann, J. J.	Franklin
Matheson, J. P.	Gaston
Maxwell, M. F.	Graham
Meadows, E. B.	Granville
Morris, J. A.	Granville
Murphy, W. B.	Greene
Meadows, W. J.	Guilford
Michaux, E. R.	Guilford
Miles, May S.	Guilford
Melvin, W. C.	Harnett
Moore, F. T.	Harnett
Mease, J. H.	Haywood
Medford, S. B.	Haywood
Moore, J. E.	Haywood
Mitchell, J. H.	Hertford

Name.	*County.*
Moore, J. T.	Iredell-Alexander
Moore, N. G.	Iredell-Alexander
Moore, F. T.	Johnston
Munns, L. A.	Johnston
Monk, H. G.	Lenoir
Morphew, M. F.	McDowell
Martin, Mary L.	Mecklenburg
Mason, R. E.	Mecklenburg
Meisenheimer, C. A.	Mecklenburg
Montgomery, J. C.	Mecklenburg
Moore, B. S.	Mecklenburg
Munroe, H. S.	Mecklenburg
Munroe, J. P.	Mecklenburg
Matheson, J. P.	Mecklenburg
Monroe, A. J.	Moore
Monroe, J. P.	Moore
Monroe, W. A.	Moore
Miller, R. B.	Nash
Mariott, M. B.	Nash
Matthews, T. A.	Nash
Moorehead, R. P.	Northampton
Montford, W. J.	Onslow
Manning, I. H.	Orange
Mangum, C. S.	Orange
Murphy, W. E.	Orange
Morrill, D. S.	Pitt
Morrill, Jenness	Pitt
Moye, E. A. Jr.	Pitt
Moore, W. J.	Randolph
Martin, S. L.	Rockingham
Matherson, R. C.	Rockingham
Monk, H. L.	Rowan
Matthews, J. O.	Sampson
Moir, S. A.	Stokes
Moore, W. B.	Stokes
Macon, P. J.	Warren
Mashburn, B. D.	Wake
Mashburn, H. H.	Wake
Miller, R. B.	Wayne
Myers, J. Q.	Wilkes
Moore, C. E.	Wilson
Moore, E. G.	Wilson
Matthews, M. L.	Cabarrus
Matthews, J. M.	Moore
McPherson, J. W.	Alamance
McPherson, L. D.	Alamance
McBrayer, L. B.	Buncombe
McCracken, C. M.	Buncombe
McLean, J. N.	Buncombe
McCampbell, Jno. M.	Burke
McNairy, C. B.	Caldwell
McBride, M. H.	Caswell
McBrayer, T. E.	Cleveland
McKay, J. L.	Cleveland
McGougan, J. M.	Columbus
McGougan, J. V.	Cumberland
McKethan, Jno. C.	Cumberland
McLean, Chas. E.	Gaston
McAnally, W. J.	Guilford
McCombs, C. J.	Harnett
McKay, A. M.	Harnett
McKay, Jno. A.	Harnett
McKay, J. F.	Harnett
McLean, J. W.	Harnett
McNeil, Wm. M.	Harnett
McCracken, J. R.	Haywood
McFayden, H. L.	Haywood
McLaughlin, J. E.,	Iredell-Alexander
McDavitt, A. J.	Madison
McLaughlin, C. S.	Mecklenburg
McManaway, C. G.	Mecklenburg
McCoy, Thos. M.	Mecklenburg
McDonald, A. A.	Moore
McIver, Lynn	Moore
McLeod, A. H.	Moore
McLeod, Gilbert	Moore
McDonald, A. D.	New Hanover
McMillan, W. D.	New Hanover
MacNider, Wm. DeB.	Orange
McMullan, Oscar,	Pasquotank-Camden-Dare
McFayden, Paul R.	Randolph
McEachern, E. C.	Richmond
McPhail, L. D.	Richmond
McIntyre, D. C.	Robeson
McKinnon, W. H.	Robeson
McMillan, Ben. F.	Robeson
McMillan, J. D.	Robeson
McMillan, J. L.	Robeson
McNatt, H. W.	Robeson
McPhail, W. P.	Robeson
McAnally, Chas. B.	Rockingham
McGhee, J. W.	Rockingham
McKenzie, W. W.	Rowan
McLean, Neil	Scotland
McCanless, W. L.	Stokes
McCanless, W. V.	Stokes
McClain, W. R.	Union
McCullers, J. J. L.	Wake
McGeachy, R. S.	Wake
McGee, J. W.	Wake
McKee, Jas.	Wake
McGee, J. W. Jr.	Wake
Nicholson, J. T.	Beaufort
Nicholson, P. A.	Beaufort.
Nicholson, S. T.	Beaufort
Nowell, L. A.	Bertie
Norman, Geo. W.	Caswell
Newbern, J. M.	Currituck
Nichols, R. E.	Durham
Newall, H. A.	Franklin
Nicholson, W. G.,	Iredell-Alexander

Name.	*County.*
Nichols, A. A.	Jackson
Noble, R. J.	Johnston
Nelson, R. J.	Martin
Nisbet, W. O.	Mecklenburg
Nalle, Brodie C.	Mecklenburg
Newell, L. B.	Mecklenburg
Nicholson, J. L.	Onslow
Nobles, J. E.	Pitt
Norment, R. M.	Robeson
Norment, T. A.	Robeson
Northrup, T. L.	Robeson
Neal, J. W.	Stokes
Nance, Geo. B.	Union
Neal, Jno. W.	Union
Orr, C. C.	Buncombe
Orr, Peter B.	Buncombe
Orr, R. J.	Cherokee
Oates, Geo.	Cleveland
O'Kelly, J. M.	Durham
Orr, N. A.	Mecklenburg
Page, Jno. W.	Alamance
Pickett, J. A.	Alamance
Parris, O J.	Alamance
Pennington, S. E.	Ashe
Pritchard, Jno. L.	Bertie
Paquin, Paul	Buncombe
Purefoy, Geo. W.	Buncombe
Phifer, Ed. W.	Burke
Pemberton, W. D.	Cabarrus
Pharr, T. F.	Cabarrus
Palmer, R. W.	Chatham
Patton, W. O.	Cherokee
Palmer, B. H.	Cleveland
Peeler, C. N.	Cleveland
Pollock, Raymond	Craven
Primrose, R. S.	Craven
Patterson, J. F.	Craven
Peacock, J. W.	Davidson
Patterson, E. C.	Durham
Pfohl, S. F.	Forsyth
Patriek, G. R.	Gaston
Paddison, J. R.	Guilford
Pierce, S. B.	Halifax
Parker, J. Rainey	Hertford
Pollard, W. B.	Hertford
Phifer, F. W.	Iredell-Alexander
Parker, G. E.	Johnston
Person, J. B.	Johnston
Parrott, James M.	Lenoir
Parrott, W. T.	Lenoir
Parrott, A. DeK.	Lenoir
Pridgeon, C. L.	Lenoir
Petrie, R. W.	Lincoln
Proctor, J. B.	Martin
Pharr, W. W.	Mecklenburg
Pressly, Geo. W.	Mecklenburg
Palmer, R. W.	Moore
Phillips, J. B. Jr.	Nash
Parris, D. C.	Orange
Pate, G. M.	Robeson
Pope, H. T.	Robeson
Peele, C. M.	Rowan
Peele, G. M. Van	Rowan
Pate, W. T.	Scotland
Prince, D. M.	Scotland
Phillips, M. D.	Stokes
Price, W. H.	Union
Perkins, D. R.	Union
Pendleton, [illegible]. S.	Vance
Perry, M. P.	Warren
Peete, C. H.	Warren
Picot, L. J.	Warren
Penny, J. A. J.	Wake
Powers, J. B.	Wake
Powell, W. E.	Goldsboro
Quickel, T. C.	Gaston
Roberts, J. D.	Ashe
Rodman, Jno. C.	Beaufort
Ruffin, J. B.	Bertie
Robinson, Newton	Bladen
Reagan, J. A.	Buncombe
Reagan, W. L.	Buncombe
Reed, C. E.	Buncombe
Reynolds, Carl V.	Buncombe
Reynolds, T. F.	Buncombe
Reynolds, J. H.	Buncombe
von Ruck, Karl	Buncombe
von Ruck, Silvio	Buncombe
Riddle, Jos. B.	Burke
Rogers, Francis O.	Cabarrus
Royster, S. S.	Cleveland
Rhein, J. F.	Craven
Ritter, F. W.	Currituck
Rodwell, J. W.	Davie
Ross, Geo. H.	Durham
Rierson, R. L.	Forsyth
Riddick, I. G.	Franklin
Reitzel, C. E.	Franklin
Reid, R. M.	Gaston
Robinson, Frank	Gaston
Reitzel, C. E.	Guilford
Reitzel, J. R.	Guilford
Richardson, W. J.	Guilford
Roberson, Chas.	Guilford
Reives, J. T.	Guilford
Register, F. M.	Guilford
Rogers, McLean	Haywood
Russell, Lloyd P.,	Henderson-Polk
Robinson, G. J.	Johnston
Rose, A. H.	Johnston

Name.	*County.*
Rogers, W. A.	Macon-Clay
Roberts, Frank	Madison
Robinson, W. F.	Madison
Reynolds, J.	Madison
Rhodes, J. S.	Martin
Register, E. C.	Mecklenburg
Reid, Thos. N.	Mecklenburg
Reid, N. R.	Mecklenburg
Russell, E. Reid.	Mecklenburg
Russell, F. H.	New Hanover
Robinson, W. A.	Northampton
Reed, D. H.	Northampton
Riddick, T. M.	Perquimans
Riddick, W. M.	Perquimans
Ricks, L. E.	Pitt
Redding, A. H.	Randolph
Rowland, W. H.	Robeson
Reedy, Howard	Robeson
Rosier, R. G.	Robeson
Rosier, S. B.	Robeson
Ray, J. B.	Rockingham
Ramseur, G. A.	Rowan
Reid, Geo. P.	Rutherford
Ring, J. W.	Surry
Roberson, Waxhaw	Union
Ray, O. L.	Wake
Rankin, W. S.	Wake
Rogers, Jas. R.	Wake
Royster, H. A.	Wake
Royster, W. I.	Wake
Roberts, J. D.	Wayne
Robinson, M. E.	Wayne
Royall, M. A.	Yadkin
Ray, J. L.	Yancey
Stafford, W. G.	Alamance
Smith, L. C.	Anson
Small, W. P.	Beaufort
Staley, S. W.	Beaufort
Sawyer, James	Buncombe
Sevier, Dan. E.	Buncombe
Sevier, Jos. T.	Buncombe
Smith, Owen	Buncombe
Stevens, M. L.	Buncombe
Smoot, J. E.	Cabarrus
Shuford, J. H.	Catawba
Skinner, L. C.	Catawba
Self, L. L.	Cleveland
Smith, W. F.	Columbus
Shaw, Henry M.	Currituck
Smith, O. F.	Duplin
Smith, J. A.	Durham
Savage, R. L.	Edgecombe
Speight, R. H.	Edgecombe
Staton, L. L.	Edgecombe
Shaffner, J. F.	Forsyth
Shaffner, J. F. Jr.	Forsyth
Spainhour, E. H.	Forsyth
Spencer, W. O.	Forsyth
Strickland, E. F.	Forsyth
Summers, C. L.	Forsyth
Sloan, J. M.	Gaston
Sanderford, J. F.	Granville
Sikes, G. T.	Granville
Scott, C. L.	Guilford
Stamey, E. L.	Guilford
Stanton, D. A.	Guilford
Swain, J. F.	Guilford
Sexton, C. H.	Harnett
Smith, F.	Harnett
Stringfield, Thos.	Haywood
Stringfield, Sam. L.	Haywood
Sharpe, F. L.	Iredell-Alexander
Self, Wm.	Jackson
Stanly, Jno. H.	Johnston
Smithwick, J. W. P.	Lenoir
Saine, Jno. W.	Lincoln
Siler, F. L.	Macon-Clay
Sullivan, J. M.	Macon-Clay
Saunders, J. H.	Martin
Smithwick, J. E.	Martin
Simmons, Jno. O.	McDowell
Stephenson, C. B.	Mecklenburg
Stone, W. M.	Mecklenburg
Strong, C. M.	Mecklenburg
Strong, W. M.	Mecklenburg
Sheppard, J. L.	Moore
Shields, H. B.	Moore
Snipes, E. P.	Moore
Street, M. Eugene	Moore
Swett, W. P.	Moore
Shamburger, J. B.	Montgomery
Speight, R. H. Jr.	Nash
Strickland, J. T.	Nash
Schonwald, Jno. T.	New Hanover
Stancill, R. H.	Northampton
Stancill, W. W.	Northampton
Stephenson, M. R.	Northampton
Sutton, C. W.	Onslow
Sawyer, C. W.,	Pasquotank-Camden-Dare
Sawyer, W. W.,	Pasquotank-Camden-Dare
Smith, R. W.	Perquimans
Swann, J. F.	Person
Senaub, O. P.	Person
Skinner, L. C.	Pitt
Summers, W. I.	Randolph
Steele, W. H.	Richmond
Stamps, Thos.	Robeson
Stephens, Wm. F.	Robeson
Smith, J. R.	Rockingham
Stewart, J. T.	Rockingham
Sweany, Jno.	Rockingham

Name.	*County.*
Sawyer, C. J.	Rowan
Smoot, M. L.	Rowan
Summerell, E. M.	Rowan
Stokes, J. E.	Rowan
Sikes, G. L.	Sampson
Sloan, Henry	Sampson
Stevens, J. A.	Sampson
Shaw, Daniel	Scotland
Shaw, Wm. G.	Scotland
Slate, J. S.	Stokes
Slate, W. C.	Stokes
Slate, J. W.	Stokes
Smith, J. T.	Stokes
Smith, J. B.	Surry
Stevens, S. A.	Union
Stewart, H. D.	Union
Sorrell, L. P.	Wake
Stevens, Ralph S.	Wake
Speight, J. W.	Washington
Spruill, J. L.	Washington
Smith, R. A.	Wayne
Spicer, J. D.	Wayne
Spicer, John	Wayne
Spicer, William	Wayne
Sutton, W. G.	Wayne
Somers, L. P.	Wilkes
Shore, Thad. W.	Yadkin
Tate, W. N.	Alamance
Thompson, J. B.	Alamance
Tyson, T. D.	Alamance
Thompson, C. D.	Anson
Testerman, J. C.	Ashe
Tayloe, David T.	Beaufort
Tayloe, Joshua	Beaufort
Tayloe, Armistead K.	Beaufort
Tennent, G. S.	Buncombe
Taylor, I. M.	Burke
Thompson, Hugh R.	Burke
Taylor, J. N.	Chatham
Trent, W. J.	Cleveland
Thompson, N. A.	Columbus
Teague, R. J.	Durham
Thigpen, W. J.	Edgecombe
Taylor, W. L.	Granville
Thompson, H. R.	Burke
Turner, J. A.	Guilford
Turner, J. P.	Guilford
Thames, John	Guilford
Tull, Henry	Lenoir
Tilson, J. C.	Madison
Thompson, Cyrus	Onslow
Thigpen, G. T.	Pitt
Tucker, F. P.	Rockingham
Tuttle, A. F.	Rockingham
Taylor, G. G.	Rockingham
Tankersley, James W.	Rowan

Name.	*County.*
Trantham, H. T.	Rowan
Twitty, J. C.	Rutherford
Twitty, T. B.	Rutherford
Taylor, W. I.	Sampson
Taylor, W. S.	Surry
Thompson, K.	Surry
Teague, J. H.	Swain
Tucker, Jno. H.	Vance
Templeton, Jas. M.	Wake
Thompson, S.	Wake
Tucker, H. McKee	Wake
Turlington, W. T.	Wayne
Thompson, R. L.	Wilkes
Underhill, H. P.	Pamlico
Utley, B. S.	Wake
Utley, H. G.	Wake
Utley, H. H.	Wake
Vestal, W. J.	Davidson
Vestal, W. L.	Guilford
Vick, Geo. D.	Johnston
Valentine, Thos.	Northampton
Walker, W. E.	Alamance
Walker, L. A.	Alamance
Watson, Geo. S.	Alamance
Wyatt, J. L.	Anson
Walker, L. S.	Bertie
Watson, D. I.	Brunswick
Weaver, H. B.	Buncombe
Whittington, W. P.	Buncombe
Williams, J. H.	Buncombe
Warlick, E. S.	Burke
White, W. M.	Caldwell
Wilson, C. L.	Caldwell
Wright, J. B.	Caldwell
West, Geo. H.	Catawba
Whitesides, B. F.	Catawba
Wilson, W. E.	Catawba
Webb, Ben. G.	Cherokee
Wood, J. W.	Cleveland
Withers, S. M.	Columbus
Ward, J. M.	Craven
Watson, Leon	Moore
Williams, A. F.	Duplin
Williams, J. M.	Duplin
Ward, M. P.	Durham
Wilson, H. F.	Durham
Wilkerson, Chas. B.	Durham
Williams, J. D.	Forsyth
Wright, J. Thos.	Forsyth
Wheless, J. R.	Franklin
Winston, A. R.	Franklin
Wilkins, S. A.	Gaston
Wilson, F. G.	Gaston
Williams, Geo. D.	Gates

Name.	*County.*
Williams, J. B.	Granville
West, Albert	Greene
Whittington, W. W.	Greene
Wilson, A. R.	Guilford
Williams, Jno. R.	Guilford
Williams, Jno. A.	Guilford
Walker, R. L.	Haywood
Way, J. Howell	Haywood
Willis, A. P.	Haywood
Wilson, J. E.	Haywood
Waldrop, J. G.	Henderson-Polk
Ward, J. E.	Iredell-Alexander
Whitaker, R. A.	Lenoir
Woodley, C. B.	Lenoir
Wootten, R. W.	Lenoir
Wise, J. S.	Lincoln
Weaver, W. J.	Madison
Woody, S. B.	Madison
Wakefield, W. H.	Mecklenburg
Walker, C. E.	Mecklenburg
Whisnant, A. M.	Mecklenburg
Winchester, F. M.	Mecklenburg
Witherbee, W. D.	Mecklenburg
Wilder, H. M.	Mecklenburg
Woodley, W. T.	Mecklenburg
Witherspoon, B. J.	Mecklenburg
Wilcox, J. W.	Moore
Whitehead, J. P.	Edgecombe
Whitehead, W. H.	Edgecombe
Whitaker, W. H.	Edgecombe
Wessell, J. C.	New Hanover
Wood, L. J.	New Hanover
Whitehead, R. H.	Orange
Williams, Claude B.,	Pasquotank-Camden-Dare
Wood, J. E.,	Pasquotank-Camden-Dare
Williams, R. J.	Pender
Winslow, C. C.	Perquimans
White, Thos. N.	Perquimans
Wise, J. A.	Person
Whitfield, W. C.	Pitt
Webb, W. P.	Richmond
Williamson, J. H.	Richmond
Wharton, C. R.	Rockingham
Williams, Jno. A.	Rockingham
West, R. M.	Rowan
Whitehead, Jno.	Rowan
Withers, Banks	Rowan
Wiseman, C. B.	Rutherford
Wilson, R. B.	Sampson
Whitley, D. P.	Stanly
Whitley, V. A.	Stanly
Watkins, T. T.	Stokes
Withers, W. W.	Stokes
Woltz, J. L.	Surry
Woltz, J. R.	Surry
Wallis, W. J.	Transylvania
Whitley, A. D. N.	Union
Ward, W. H.	Washington
White, J. W.	Wilkes
Williams, A. F.	Wilson
York, N. D.	Alamance
Young, R. S.	Cabarrus
Yarborough, R. F.	Franklin
Young, James	Iredell-Alexander
Yount, E. M.	Iredell-Alexander
Young, J. J.	Johnston
Young, J. W.	Rowan
Young, G. E.	Rutherford
Young, G. W.	Transylvania
Zimmerman, C. St. V.	Buncombe
Zimmerman, R. U.	Davidson
Zollicoffer, A. B.	Halifax
Zollicoffer, D. B.	Halifax

Members of the Component County Medical Societies of the Medical Society of the State of North Carolina, May 13, 1907.

(Gentlemen will confer a favor upon the Secretary by promptly advising of any errors, deaths, removals or other changes noted. It is desired to preserve the record as accurate as possible, *and it is to be remembered that it will be just so accurate as reported by the County Society officers and members.*)

ALAMANCE COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, R. A. Freeman, Burlington..... 1 1-2 course, Wash. Univ., Balto.	1879	1904
Secretary, L. A. Walker, Burlington..... Univ. Coll. Med., Va.	1899	1904
Stafford, W. G., Burlington..... Bellevue, N. Y., 1891.	1879	1890
Faucett, T. S., Burlington..... Balto. Med. Coll., 1893.	1893	1896
Anderson, C. A., Burlington..... P. & S., Balto., 1900.	1893	1899
Page, J. W., Burlington..... P. & S., Balto.	....	1904
Montgomery, H. M., Burlington..... N. C. Med. Coll.	1903	1904
Moore, H. R., Burlington..... Coll. P. & S., Atlanta, 1899.	1899	1904
Long, G. W., Graham..... Univ. Pa., 1877.	1877	1877
Walker, W. E., Graham..... Med. Coll., Va.	1903	1905
Parish, O. J., Graham..... Balto. Med. Coll., 1897.	1897	1904
Goley, W. R., Graham..... Coll. P. & S., Balto., 1885.	1885	1893
York, N. D., Mebane.....	....	1905
Tyson, T. D., Mebane..... Univ. Coll. Med., Va., 1899.	1899	1904
Pickett, J. A., Burlington, R. F. D..... Univ. Nashville, 1894.	1894	1904
McPherson, S. D., Haw River..... Univ. Md., 1903.	1903	1903
McPherson, J. W., Haw River..... Balto. Med. Coll., 1898.	1898	1898
Watson, G. S., Elon College..... Coll. P. & S., Balto., 1874.	....	1904

ANSON COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, J. M. Covington, Wadesboro Med. Coll. S. C., 1874.	1879	1879
Secretary, W. W. Barrett, Peachland Ky. Sch. Med., 1892.	1897	1904

BEAUFORT COUNTY SOCIETY.

President, H. H. Hunter, Pinetown Med. Coll. Va., 1900.	1901	1904
Secretary, Ira M. Hardy, Washington Med. Coll., Va., 1901.	1902	1902
Blount, W. A., Washington Bellevue Med. Coll., 1892.	1892	1894
Blount, J. G., Washington Bellevue Med. Coll., 1892.	1892	1893
Bonner, H. M., Aurora Med. Coll., Va., 1897.	1897	1902
Brown, E. M., Washington Bellevue Med. Coll., 1896.	1896	1901
Bullock, W. J., Belhaven Univ. Pa., 1858.	....	1904
Dixon, W. H., Edwards Med. Coll. Va., 1901.	1901	1901
Hardy, Ira M., Washington Med. Coll. Va., 1901.	1902	1902
Hunter, H. H., Pinetown Med. Coll. Va., 1900.	1901	1904
Kellum, W. D., Belhaven	....	1904
Mariner, N. C., Belhaven Univ. Coll. Med., Va.	1903	1904
Nicholson, J. L., Washington Univ. Med., 1904.	1904	1906
Nicholson, J. T., Bath P. & S., Balto., 1885.	1885	1904
Nicholson, P. A., Washington P. & S., Balto., 1889.	1889	1901
Nicholson, S. T., Washington P. & S., Balto., 1881.	1885	1902
Rodman, John C., Washington Bellevue Med. Coll., 1892.	1892	1895
Small, W. P., Washington Univ. N. Y., 1875.	....	1905
Staley, S. W., Aurora Med. Coll. S. C., 1901.	1901	1904
Tayloe, D. T., Washington Bellevue Med., 1885.	1885	1885

Members and Address.	*Licensed.*	*Joined State Society.*
Tayloe, Joshua, Washington..... Bellevue Med. Coll., 1892.	1892	1904
Tayloe, Armistead K., Aurora.....	....	....
Williams, J. W., Washington..... Univ. Med., 1906.	1906	1906

BERTIE COUNTY SOCIETY.

President, P. C. Jenkins, Roxobel..... Bellevue Med., 1873.	....	1904
Secretary, Jno. L. Pritchard, Windsor..... P. & S., Balto., 1906.	1906	1906
Mitchell, Wayland, Lewiston..... Univ. Md., 1895.	1896	1904
Nowell, L. A., Colerain..... Univ. Md., 1894.	1894	1905
Capehart, A., Roxobel ..... Balto. Med. Coll., 1887.	....	1905
Harrell, W. J., Aulander..... P. & S., Balto.	....	1892
Horton, E. H., Aulander..... P. & S., Balto., 1884.	....	1904
Ruffin, J. B., Powellsville..... Univ. South, Sewanee, Tenn., 1898.	1906	1906
Kenny, S. B.	....	....

BLADEN COUNTY SOCIETY.

President, W. H. G. Lucas, Whitehall..... Univ. of Pa., 1869.	....	1904
Secretary, Newton Robinson, Elizabethtown..... Univ. of Pa., 1869.	....	1904
Evans, L. B., Clarkton..... Univ. Coll. Med., 1900.	1900	1904
Clark, George L., Clarkton..... Univ. N. Y., 1876.	....	1904

BRUNSWICK COUNTY SOCIETY.

President, E. G. Goodman, El Paso..... Univ. Md., 1891.	1891	1892
Secretary, J. Arthur Dosher, Southport..... Balto. Med., 1903.	1903	1903
Watson, D. I., Southport..... Univ. Louisville, Ky., 1890.	1890	1891
Moore, T. V., Phoenix..... Balto. Med., 1901.	1901	....

BUNCOMBE COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, W. L. Dunn, Asheville..... Univ. Mich., 1891.	1900	1900
Secretary, G. S. Tennent, Asheville..... N. C. Med. Coll., 1894.	1894	1898
Ambler, C. P., Asheville..... West. Reserve Univ., O., 1889.	1890	1891
Archer, T. J., Black Mountain..... N. West Univ., Ill., 1896.	1905	1906
Battle, S. W., Asheville..... Bellevue, N. Y., 1875.	....	1887
Briggs, H. H., Asheville..... Univ. Yale, 1897.	1901	1903
Brookshire, H. G., Asheville, R. F. D. No. 5..... N. C. Med., 1905.	1905	1906
Brown, T. E. W., Asheville..... P. & S., N. Y., 1900.	1903	1904
Brownson, W. C., Asheville..... Univ. N. Y., 1878.	....	1896
Burroughs, J. A., Asheville..... Louisville Med. Coll., 1882.	1884	1889
Calloway, A. W., Asheville..... Chic. Homeop. Med. Coll., 1875.	1899	1904
Carroll, R. S., Asheville.....	....	....
Cheesborough, T. P., Asheville..... Univ. N. Y., 1891.	1891	1899
Clemenger, F. J., Asheville..... Univ. Denver, 1902.	1903	1904
Clontz, W. J., Alexander..... Vanderbilt Univ., 1888.	....	1904
Cocke, J. E., Asheville..... Louisville Med., 1905.	1905	1906
Cotton, C. E., Black Mountain..... Univ. Wooster, O., 1889.	1901	1901
Elias, L. W., Asheville..... P. & S., N. Y., 1903.	1906	1906
Fletcher, M. H., Asheville..... Bellevue Med. Coll., 1881.	1881	1881
Glenn, E. B., Asheville..... Jeff. Med. Coll., 1896.	1896	1899
Harris, J. A., Jupiter..... 1 course Jeff. Med., 1860.	1885	1894
Holmes, L. E., Biltmore..... Univ. Pa., 1897.	1901	1903
Jordan, C. S., Asheville..... Univ. N. Y., 1890.	1891	1899
Laird, E. C., Asheville..... Univ. Md., 1877.	....	1900

Members and Address.	*Licensed.*	*Joined State Society.*
McBrayer, L. B., Asheville Louisville Med. Coll., 1889.	1891	1899
McCracken, C. M., Fairview Non-Grad. N. C. Med.	1896	1904
Merrimon, L. A., Asheville Woman's Med. Coll., 1900.	1899	1904
Merriwether, F. T., Asheville Univ. Louisville, Ky., 1886.	1888	1888
Minor, C. L., Asheville Univ. Va., 1888.	1895	1898
Morris, E. R., Asheville Louisville Med. Coll.	1896	1899
Orr, C. C., Asheville Univ. Md., 1904.	1904	1905
Paquin, P., Asheville Univ. Mo., 1887.	1899	1899
Purefoy, G. W., Asheville Jeff. Med. Coll., 1876.	1884	1904
Reagan, J. A., Weaverville Vanderbilt Univ., 1877.	....	1881
Reed, C. E., Asheville Jeff. Med. Coll.	1902	1904
Reynolds, C. V., Asheville Univ. N. Y., 1895.	1895	1896
Reynolds, J. H., Asheville Louisville Med., 1903.	1903	1903
Ringer, F. H., Asheville P. & S., N. Y., 1904.	1906	....
Von Ruck, S. H., Asheville Bellevue Med. Coll., 1899.	1899	1902
Sawyer, J., Asheville Bellevue Med. Coll., 1897.	1897	1899
Sevier, D. E., Asheville Jeff. Med., 1895.	1895	1899
Sevier, J. T., Asheville Jeff. Med., 1895.	1895	1899
Smith, O., Asheville Jeff. Med., 1905.	1905	1906
Stevens, M. L., Asheville Balto. Med., 1891.	1892	1893
Weaver, H. B., Asheville Wash. Univ. Med. Coll., 1872.	1881	1881
Whittington, W. P., Asheville P. & S., Balto., 1882.	1882	1882
Williams, J. H., Asheville Univ. of Iowa, 1862.	1881	1881
Pritchard, A. T., Asheville Jefferson, Phila., 1905.	1905	1906

Members and Address.	*Licensed.*	*Joined State Society.*
Johnson, A. E., Asheville..... Woman's Med. Coll., Pa., 1905.	1905	....
Von Ruck, K., Asheville..... Univ. Mich., 1879.	1899	1902

BURKE COUNTY SOCIETY.

President, E. W. Phifer, Morganton..... N. C. Med. Coll., 1902.	1902	1904
Secretary, Isaac M. Taylor, Morganton..... P. & S., N. Y., 1882.	1883	1883
Murphy, P. L., Morganton..... Univ. Va., 1870; Univ. Md., 1871.	1873	1873
Laxton, J. L., Morganton..... Wash. Univ., Md., 1868.	....	1891
Farthing, Logan E., Morganton..... Univ. N. C., 1906.	1906	....
Anderson, Paul V., Morganton..... Univ. Va., 1904.	1904	1906
Hall, James K., Morganton..... Jeff. Med. Coll., 1904.	1906	1906
Hennessee, Emanuel A., Glen Alpine..... U. S. Grant Univ., 1900.	1902	1904
Riddle, J. Bennett, Bridgewater..... Vanderbilt, 1898.	1904	1905
McCampbell, John, Morganton..... Balto. Med., 1894.	1895	1899
Anderson, James R., Morganton..... Tulane Univ., 1882.	1885	1904
Warlick, E. S., Morganton..... Univ. Tenn., 1881.	....	1904
Speight, R. H., Jr., Rocky Mount.....	....	....

CABARRUS COUNTY SOCIETY.

President, D. G. Caldwell, Concord..... Univ. of Md., 1885.	1885	1885
Secretary, F. O. Rogers, Concord..... Univ. of Md., 1901.	1901	1901
Archey, L. M., Concord..... P. & S., Balto., 1880.	1885	1888
Burleyson, L. N., Concord..... Univ. of Md., 1891.	1891	1904
King, R. Morrison, Concord..... Jefferson Med., 1903.	1903	....
Young, R. S., Concord..... N. Y. Univ. Med. Coll., 1881.	1882	1882

Members and Address.	*Licensed.*	*Joined State Society.*
Lafferty, J. S., Concord..... Univ. Md., 1881.	1885	1890
Grier, S. A., Harrisburg.....	....	1904
Black, J. C., Pioneer Mill..... Univ. Md., 1886.	1886	1891
Barrier, P. A., Mt. Pleasant (honorary member)..... L. I. Med. Coll., 1861.	1861	1861
Pharr, T. F., Concord..... Jeff. Med., 1875.	1881	1881
Matthews, J. M., Mt. Pleasant..... Univ. Tenn.	1890	....
Gouger, Geo. J., Tulin..... Univ. Md., 1891.	1891	1899

CALDWELL COUNTY SOCIETY.

President, A. A. Kent, Lenoir..... Jeff. Med. Coll., 1885.	1885	1894
Secretary, W. P. Ivey, Lenoir..... Univ. Md., 1885.	1885	1891
Carter, G. H., King's Creek, R. F. D..... Univ. N. Y., 1877.	....	1904
White, W. M., Collettsville..... P. & S., Atlanta, 1899.	1899	1904
Flowers, G. E., Granite Falls..... Ico. So. Med. Coll.	....	1904
Flowers, B. G., Granite Falls, R. F. D..... Non-Grad.; practice prior to 1885.	....	1904
Jones, A. D., Granite Falls..... Louisville Med. Coll., 1876.	....	1904
Mattocks, C. J., Lenoir.....	....	1904
McNairy, C. B., Lenoir..... P. & S., Balto., 1893.	1893	1905
Wilson, C. L., Lenoir..... U. S. Grant Univ., 1903.	1903	1905
Corpening, O. J., Granite Falls..... Univ. Coll. of Med., Richmond, 1906.	1906	1906
Coffey, L. H., Mortimer..... Univ. Coll. of Med., Richmond, 1906.	1906	....

CARTERET COUNTY SOCIETY.

President, F. M. Clark, Beaufort..... P. & S., Balto.	1894	1904
Secretary, D. S. George, Marshallburg..... N. C. Med. Coll., 1903.	1903	1903
Adams, L. C., Atlantic..... N. C. Med. Coll., 1903.	1903	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Bonner, K. P. B., Morehead City..... Med. Coll. Va., 1905.	1905	1906
Chapin, A. B., Beaufort..... Univ. Phila., 1868.	....	1904
Davis, Geo., Beaufort..... Ky. Sch. Med., 1896.	1902	1904
Headen, W. E., Morehead City..... Univ. Md., 1891.	1890	1891
Duncan, C. L., Beaufort..... Univ. Md., 1902.	1892	1904
Mason, C. N., Harlow..... P. & S., Balto., 1882.	....	1904
Paul, Wm. T., Stacey..... Univ. Md., 1869.	....	1904

CASWELL COUNTY SOCIETY.

President, B. E. Love, Ridgeville..... Univ. Md., 1904.	1904	1905
Secretary, M. H. McBryde, Milton..... Univ. Coll. Med., Va., 1901.	1901	1904
Badgett, J. F., Blackwell..... P. & S., Balto., 1881.	....	1904
Malloy, S. A., Yanceyville..... Ky. School Med., 1897.	1898	1903

CATAWBA COUNTY SOCIETY.

President, J. T. Johnson, Hickory..... Univ. Pa., 1861.	....	1904
Secretary, J. H. Shuford, Hickory..... Univ. Mich., 1901.	1902	1902
Abernathy, H. L., Hickory..... Louisville Med. Coll., 1886.	1887	1904
Abernathy, W. L., Hickory..... Ky. Sch. Med., 1877.	1879	1904
Campbell, J. R., Newton..... Wash. Univ., Md., 1871.	....	1898
Whitesides, B. F., Hickory..... Univ. Md., 1877.	1881	1881
Menzies, H. C., Hickory..... N. C. Med. Coll., 1894.	1894	1894
Stevenson, T. F., Hickory..... Louisville Med. Coll., 1893.	1893	....
Manville, W. E., Hickory..... Columbia Univ., Washington, D. C., 1904.	1906	....
Long, F. Y., Catawba..... N. C. Med. Coll., 1899.	1898	1904
Wilson, W. E., Sherrill's Ford..... Louisville Med. Coll., 1886.	1886	1904

CHATHAM COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, R. W. Palmer, Gulf..... Louis. Med. Coll., 1890.	1891	1891
Secretary, H. T. Chapin, Pittsboro..... Louis. Med. Coll., 1886.	1886	1886
Strickland, W. J., Moncure.....	....	....
Edwards, J. D., Siler City..... Louis. Med. Coll., 1887.	....	1894
Kirkman, T. A., Siler City.....	....	1905
Burns, Wm. M., Goldston..... P. & S., Balto., 1878.	....	1905
Upchurch, C. G., Apex, R. F. D. No. 3.....	....	....
Strowd, O. B., Ore Hill.....	....	....

CHEROKEE COUNTY SOCIETY.

President, E. G. Webb, Andrews..... Louisville Med. Coll., 1885.	1885	1904
Secretary, R. J. Orr, Andrews..... Louisville Med Coll.	....	1904
Maxwell, M. M., Robbinsville..... Southern Med. Coll., 1885.	....	1904
Highway, S. C., Murphy..... Med. Coll., Ohio, 1885.	1904	1904
Casteel, L. R., Culbertson..... Vanderbilt Univ., 1893.	1906	1906
Patton, W. O., Murphy.....	....	1904

CLEVELAND COUNTY SOCIETY.

President, R. C. Ellis, Shelby..... P. & S., Balto., 1886.	....	1901
Secretary, L. V. Lee, Lattimore..... Atlanta Med. Coll., 1894.	1897	1904
Grigg, W. T., Shelby, R. No. 3.....	....	1904
Mitchell, W. F., Shelby..... Univ. Md., 1899.	1900	1904
McKay, J. L., Kings Mountain..... Univ. Phila., 1870.	....	1904
Palmer, B. H., Shelby..... Louisville Med., 1898.	1898	1904
Royster, S. S., Mooresboro..... Tenn. Med., 1890.	1896	1903
Wood, J. W., Shelby, R. No. 3.....	....	1904
Aydlette, J. P., Earls..... Univ. Ky., 1901.	1903	1903
Champion, C. O., Mooresboro..... Atlanta Med. Coll., 1887.	....	1898

Members and Address.	*Licensed.*	*Joined State Society.*
Oates, Geo., Grover..... Univ. Louisville, Ky., 1894.	1902	1904
Lattimore, E. B., Lawndale..... Bellevue Med. Coll., 1898.	1896	1904
McBrayer, T. E., Shelby.....	....	....

COLUMBUS COUNTY SOCIETY.

President, T. C. Johnson, Vineland..... Med. Coll. Va., 1903.	1903	1905
Secretary, H. B. Maxwell, Whiteville..... Univ. of Md., 1902.	1902	1902
Blake, J. T., Chadbourn..... N. C. Med. Coll., 1905.	1905	1906
Floyd, A. G., Fair Bluff..... Univ. Md., 1885.	....	1904
Johnson, T. C.	....	....
Jordain, D. B., Cronley..... Jeff. Med. Coll., 1885.	....	1904
McGougan, J. M., Cerro Gordo..... Univ. Nash., Tenn.	....	1904
Smith, W. F., Chadbourn..... N. C. Med., 1904.	1904	1905
Withers, S. M., Chadbourn..... N. C. Med., 1902.	1902	1902

CRAVEN COUNTY SOCIETY.

President, Francis Duffy, New Bern..... Univ. of Va., 1868.	1872	1872
Secretary, James E. Patrick, New Bern..... Univ. Coll. of Med., 1900.	1900	1900
Duffy, Chas., New Bern..... Univ. N. Y., 1859.	....	1870
Hughes, F. W., New Bern..... Univ. Pa., 1880.	1885	1904
Primrose, R. S., New Bern..... Bellevue Med. Coll., 1889.	1890	1904
Caton, G. A., New Bern..... Med. Coll. Va., 1898.	1898	1904
Jones, R. Duval, New Bern..... Univ. of Md., 1896.	1897	1904
Duffy, L., New Bern..... P. & S., Balto., 1889.	1889	1906
Street, N. H., New Bern.....	....	....
Gibbs, N. M., New Bern.....	....	....
Pollock, Raymond, Dover..... Jeff. Med. Coll., 1897.	1900	1900
Hammond, A. F., Pollocksville..... Univ. Coll. of Med., Va., 1903.	1903	1905

CUMBERLAND COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, K. G. Averitt, Cedar Creek..... Balto. Med., 1893.	1893	1902
Secretary, John C. Dye, Fayetteville..... N. C. Med. Coll., 1905.	1905	1906
Marsh, J. H., Fayetteville..... Jeff. Med. Coll., 1889.	1889	1890
Highsmith, S., Fayetteville..... Univ. Med. Coll., Va., 1901.	1901	1902
Highsmith, J. F., Fayetteville..... Jeff. Med. Coll., 1889.	1889	1893
MacKethan, Jno. A., Fayetteville..... N. C. Med. Coll., 1901.	1901	1904
McGougan, J. V., Fayetteville..... Univ. Med. Coll., 1893.	1893	1904
Jordan, Wm. S., Fayetteville..... Univ. N. C., 1906.	1906	1906
Rose, A. S., Fayetteville..... Univ. Coll. Med., Va., 1901.	1901	1904
Graham, Geo. A., Raeford.....	....	....
Bullock, T. C., Autryville,.....	....	1904
Haigh, T. D., Fayetteville..... Univ. of N. Y., 1851.	....	1871
McNeill, J. W., Foy, R. F. D.....	....	....

CURRITUCK COUNTY SOCIETY.

President, H. M. Shaw, Shawsboro..... Wash. Univ., Md., 1871.	....	1904
Secretary, Stuart M. Mann, Moyock..... P. & S., Balto., 1885.	1885	1904
Griggs, W. T., Poplar Branch..... Univ. Va., 1896.	1896	1901
Newbern, J. M., Jarvisburg.....	....	....
Garrington, J. F., Coinjock.....	....	....
Ritter, W. F., Moyock..... One course, P. & S., Balto., 1885	1885	1885

DAVIDSON COUNTY SOCIETY.

President, E. J. Buchanan, Lexington..... Univ. Md., 1892.	1892	1900
Secretary, D. J. Hill, Lexington..... P. & S., Balto., 1893.	1893	1894
Hill, W. Lee, Lexington, R. F. D..... P. & S., Balto., 1893.	1893	1894
Myers, J. A., Linwood, R. F. D.....	....	1904
Cathell, J. E., Linwood, R. F. D..... Univ. Md., 1899.	1902	1902

Members and Address.	*Licensed.*	*Joined State Society.*
Mock, J. H., Thomasville..... Med. Coll. Va., 1898.	1898	1904
Dorsett, H. W., Wallburg, R. F. D..... Jeff. Med. Coll.	1885	1885
Zimmerman, R. U., Lexington, R. F. D.....	....	1904
Vestal, W. J., Lexington..... P. & S., Balto., 1883.	....	1893
Clodfelter, C. M., Lexington..... P. & S., Balto., 1905.	1905	1906
Hill, Joel, Lexington..... P. & S., Balto., 1880.	1885	1886
Julian, C. A., Thomasville..... Louisville Med. Coll.. 1888.	1891	1893

DAVIE COUNTY SOCIETY.

President, M. D. Kimbrough, Mocksville..... Univ. Pa., 1860.	....	1904
Secretary, W. C. Martin, Mocksville..... P. & S., Balto., 1888.	1888	1904
Rodwell, J. W., Mocksville..... P. & S., Balto., 1896.	1895	1896
Byerly, A. B., Cooleemee..... Univ. Coll. Med., Va., 1896.	1896	1904
Watkins, T. T., Advance..... N. C. Med. Coll., 1896.	1896	1896
Martin, J. W., Fork Church, R. F. D..... N. C. Med. Coll., 1905.	1905	....

DUPLIN COUNTY SOCIETY.

President, Jno. M. Faison, Faison..... ..... Univ. Va., 1885.	1885	1885
Secretary, B. R. Graham, Wallace..... Univ. Va., 1895.	1895	1899
Love, Jno. F., Warsaw..... N. C. Med. Coll., 1906.	1906	1906
Williams, J. M., Warsaw..... Univ. Md., 1902.	1902	1902
Hussey, L., Warsaw..... Univ. Pa., 1853.	....	1904
Clark, Geo. T., Magnolia.....	....	....
Murhy, J. G., Kenansville.....	....	1905
Landing, J. F., Chinquapin.....	....	....
Hatcher, T. R., Rose Hill.....	....	....
Carroll, J. W., Wallace..... Univ. Md., 1903.	1903	1903

EDGECOMBE COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, J. J. Philips, Tarboro..... Coll. P. & S., N. Y., 1894.	1894	....
Secretary, S. N. Harrell, Tarboro..... Univ. Md., 1897.	1897	1904
Staton, L. L., Tarboro..... Univ. N. Y., 1870.	1870	1900
Baker, J. M., Tarboro..... Univ. Md., 1879.	1879	1879
Brothers, J. E., Conetoe..... Bellevue Med. Coll., 1874.	1874	....
Mercer, W. P., Elm City..... Univ. N. Y., 1879.	1879	1904
Thigpen, W. J., Tarboro..... Jeff. Med. Coll., 1900.	1900	1901
Walton, C. B., Macclesfield ..... Univ. Md., 1893.	1893	....

FORSYTH COUNTY SOCIETY.

President, D. N. Dalton, Winston-Salem..... Univ. N. Y., 1881.	1885	1886
Secretary, Everett A. Lockett, Winston-Salem..... Univ. Pa., 1902.	1904	1904
Summers, C. L., Winston-Salem..... Univ. Md., 1887.	1891	1896
Fearrington, J. P., Winston-Salem..... Univ. Md., 1887.	1887	1904
Shaffner, J. F., Sr., Winston-Salem..... Jeff. Med. Coll., 1860.	....	1867
Shaffner, J. F., Jr., Winston-Salem..... Univ. Pa., 1899.	1900	1903
Bynum, Jno., Winston-Salem..... Univ. N. Y., 1892.	1892	1896
Kapp, H. H., Winston-Salem..... Jeff. Med. Coll., 1901.	1901	1904
Pfohl, S. F., Winston-Salem..... Univ. Pa., 1894.	1898	1898
Bahnson, H. T., Winston-Salem..... Univ. Pa., 1867.	1869	1869
Jewett, R. D., Winston-Salem..... Univ. Va., 1888.	1890	1890
Lott, H. S., Winston-Salem..... Univ. Ga., 1884.	1888	1888
Wright, J. T., Winston-Salem..... P. & S., Balto., 1892.	1892	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Spainhour, E. H., Winston-Salem..... Balto. Med. Coll., 1898.	1898	1898
Hanes, J. L., Winston-Salem..... Univ. Md., 1902.	1902	1902
Linville, A. Y., Winston-Salem..... Univ. N. Y., 1889.	1889	1896
Copple, T. M., Winston-Salem..... Univ. Md., 1900.	1899	1905
Strickland, E. F., Bethania..... Univ. N. Y., 1887.	1887	1903
Fulp, E., Fulp (Stokes Co.) (honorary).....	....	....
Bynum, Wade, Germanton ..... Univ. Coll. Med., Va., 1900.	1900	1900
Williams, J. D., Lewisville..... Vanderbilt, 1898.	1898	1898
Davis, J. W., Pfafftown..... Med. Coll. Va., 1903.	1903	1905
Dalton, W. N., Winston-Salem.....	....	....
Davis, A. P., Winston-Salem..... Ky. Sch. Med., 1894; Geo. Wash. Univ., 1906.	1896	1904
Flynt, S. S., Rural Hall..... P. & S., Balto., 1889.	1890	1906
Carlton, R. L., Kernersville..... Univ. Md., 1906.	1906	....
Justice, J. T., Kernersville..... N. C. Med. Coll., 1904.	1904	....
Hammock, J. C., Walkertown..... P. & S., Balto., 1895.	1895	....
Griffith, J. F., Clemmons.....	....	....
Sullivan, Ham, Winston-Salem.....	....	....

FRANKLIN COUNTY SOCIETY.

President, J. E. Malone, Louisburg..... Bellevue Med. Coll., 1875.	....	1904
Secretary, S. P. Burt, Louisburg..... P. & S., Balto., 1896.	1896	1904
Yarborough, R. F., Louisburg..... Columbian Univ., D. C., 1898.	1899	1899
Newell, H. A., Louisburg..... P. & S., Balto., 1906.	1906	1906
Mann, J. J., Louisburg..... Non-Grad. Balto. Med.	1886	1904
Harris, J. H., Franklinton..... Bellevue Med., 1886.	1886	1904
Henderson, R. B., Franklinton..... Univ. Md., 1887.	1887	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Floyd, R. P., Louisburg, R. F. D. No. 1 Med. Coll. S. C.	....	....
Bobbitt, E. H., Mapleville	....	....
Wheless, J. R., Centreville P. & S., Balto., 1891.	1891	1904

GASTON COUNTY SOCIETY.

President, L. N. Glenn, Gastonia Univ. Md., 1897.	1897	1904
Secretary, Chas. E. McLean, Gastonia N. C. Med. Coll., 1903.	1904	1905
Adams, C. E., Gastonia Univ. Md., 1878.	1885	1904
Anders, McG., Gastonia Md. Med. Coll., 1901.	1902	1902
Boyette, E. C., Mt. Holly Balto. Med. Coll., 1893.	1898	1898
Davis, W. W., Belmont Ky. Sch. Med., 1875.	....	1904
Eddleman, H. M., Gastonia Ky. Sch. Med., 1886.	....	1904
Glenn, H. F., Gastonia P. & S., Atlanta, 1900.	1900	1904
Garren, R. H., Bessemer City	....	....
Garrison, D. A., Bessemer City Louisville Med. Coll., 1896.	1896	1899
Hunter, B. R., Kings Mountain Louisville Med. Coll., 1896.	1897	1904
Jenkins, J. H., Dallas Ky. Sch. Med., 1888.	1888	1904
Patrick, G. R., Lowell Univ. Md., 1879.	....	1904
Quickel, T. C., Stanley Creek Tulane Univ., 1899.	1899	1904
Reid, R. M., Gastonia Univ. N. Y., 1890.	1890	1903
Robinson, Frank, Lowell Louis. Med. Coll., 1878.	1881	1904
Sloan, J. M., Gastonia Louis. Med. Coll., 1891.	1891	1904
Wilkins, S. A., Dallas Univ. Ky., 1902.	1903	1903
Wilson, F. G., Gastonia Univ. Md., 1896.	1896	1899
Taylor, Geo. W., McAdensville N. C. Med. Coll., 1905.	1905	....

Members and Address.	*Licensed.*	*Joined State Society.*
Rowe, H. E., Bessemer City..... N. C. Med. Coll., 1904.	1904	1904
Hunter, M. C., Huntersville.....	....	....

GATES COUNTY SOCIETY.

President, Geo. D. Williams, Gatesville..... P. & S., Balto., 1897.	1897	1904
Secretary, Geo. C. Brooks, Sunbury..... P. & S., Balto., 1884.	....	1904
Corbell, E. F., Sunbury..... Univ. Md., 1886.	1893	1900
Lee, W. O. P., Reynoldson..... P. & S., Balto., 1874.	....	1904

GRANVILLE COUNTY SOCIETY.

President, S. D. Booth, Oxford..... Med. Coll. Va.	1885	1885
Secretary, Benj. K. Hays, Oxford..... Univ. Coll. Med., Richmond, 1894.	1894	1896
Booth, T. L., Oxford..... Med. Coll. S. C., 1882.	1890	1890
Cannady, S. H., Oxford..... Univ. Va., 1887.	1904	1904
Williams, J. B., Oxford..... Balto. Med., 1894.	1906	1905
Coggeshall, G. A., Oxford..... Bellevue Med. Coll., 1879.	1894	....
Hardee, P. R., Stem..... P. & S., Balto., 1885.	1885	1906
Meadows, E. B., Oxford, R. F. D. No. 1..... Univ. Coll. Med., 1901.	1901	1901
Sykes, G. T., Grissom..... Univ. Md., 1884.	1884	1884
Taylor, W. L., Stovall..... Univ. Va., 1902.	1904	1905
Sanderford, J. F., Creedmore..... P. & S., Balto., 1890.	1890	1891
Holloway, O. W., Northside..... Med. Coll. Va., 1901.	1901	1906
Morris, J. A., Oxford, R. F. D..... Vanderbilt Univ., 1893.	1893	1899

GREENE COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, Albert West, Speight's Bridge..... Cincinnati Med. Coll., 1887.	....	1904
Secretary, G. C. Edwards, Hookerton..... Bellevue Hospital Med. Coll., N. Y., 1883.	1883	1883
Harper, James, H., Snow Hill..... Jeff. Med. Coll., 1906.	1906	1906
Murphy, W. B., Snow Hill..... Univ. Med. Coll., Va., 1903.	1903	1905
Whittington, W. W., Snow Hill..... Louisville Med. Coll., 1895.	1895	1897

GUILFORD COUNTY SOCIETY.

President, W. J. Richardson, Greensboro..... Jeff. Med. Coll., 1889.	1889	1904
Secretary, E. Harrison, Greensboro..... Univ. Coll. Med., 1896.	1900	1900
Armfield, J. B., Jamestown..... Jeff. Med. Coll., 1861.	1889	1904
Ashworth, W. C., Greensboro..... Coll. P. & S., Balto., 1892.	1892	1904
Banner, C. W., Greensboro..... Univ. Md., 1899.	1899	1901
Battle, J. T. J., Greensboro..... P. & S., Balto., 1884.	1884	1889
Beall, W. P., Greensboro..... Jeff. Med. Coll., 1879.	1879	1879
Boyles, J. H., Greensboro..... P. & S., Balto., 1903	1903	1904
Brooks, J. E., Greensboro..... Univ. Coll. Med., Va., 1897.	1897	1904
Brooks, Z. T., Greensboro.....	....	....
Burrus, J. T., High Point..... Grant Univ., 1898.	1897	1898
Coble, W. A., Greensboro.....	1889	....
Davis, W. C., Summerfield..... Univ. Balto., 1896.	1889	1904
Dodson, H. H., Greensboro..... Med. Coll. Va., 1882.	1885	1886
Farrar, M. R., Greensboro..... Univ. N. C., 1905.	1905	1906
Flagg, P. W., Greensboro, R. F. D..... Wash. Univ., 1902.	1905	1906
Fortune, A. F., Greensboro..... Univ. Coll. Med., 1900.	1900	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Fox, M. F., Guilford College..... P. & S., Balto., 1881.	1885	1885
Gilmer, C. S., Greensboro, R. F. D..... Univ. N. Y., 1891.	1891	1894
Glascock, J. H., Greensboro..... Wom. Med. Coll., Balto., 1896.	1896	1898
Gordon, J. R., Jamestown..... Univ. N. Y., 1891.	1891	1894
Gove, A. M., Greensboro..... Woman's Med. Coll., N. Y., 1891.	1894	1905
Gray, C., Pleasant Garden.....	1889	1904
Grimsley, J. E., Greensboro..... Univ. Va., 1883.	1883	1884
Hilton, J. J., Greensboro..... Univ. Md., 1886.	1889	1904
Holt, W. T., McLeansville.....	....	....
Jones, J. W., Browns Summit..... Mo. Med. Coll., 1875.	1889	1904
Jones, W. M., High Point..... Univ. Md., 1903.	1903	1906
Jordan, G. E., Gibsonville..... P. & S., Balto., 1891.	1891	1904
Jarboe, J. P., Greensboro..... Georgetown, 1905.	1906	....
Kernodle, G. W., Greensboro, R. F. D..... P. & S., Balto., 1886.	....	1905
Knight, W. P., Greensboro, R. F. D..... Balto. Med. Coll., 1898.	1898	1898
Ledbetter, A. E., Greensboro..... Univ. Md., 1888.	1888	1904
Little, T. R., Greensboro..... Univ. Pa., 1900.	1903	1903
Long, J. W., Greensboro..... Vanderbilt Univ., 1883.	1884	1884
Logan, J. E., Greensboro..... Juffney Coll., 1905.	1889	1905
McAnally, W. J., High Point..... Balto. Med. Coll., 1897.	1896	1899
Meadows, W. J., Greensboro..... Med. Coll. Ala., 1894.	1899	1904
Michaux, E. R., Greensboro..... Univ. N. Y., 1889.	1889	1904
Miles, M. S., Greensboro.....	1904	1905
Paddison, J. R., Oak Ridge..... Univ. Md., 1902.	1902	1904
Reitzel, C. E., High Point..... Coll. P. & S., Ga.	1902	1902

Members and Address.	*Licensed.*	*Joined State Society.*
Reitzel, J. R., High Point.... Univ. Tenn., 1892.	1895	1896
Reaves, W. P., Greensboro....	....	....
Rieves, J. T., Greensboro.... Louisville Med. Coll., 1891.	1892	1904
Roberson, Chas., Greensboro.... L. I. Med. Coll., 1897.	1897	1901
Scott, C. L., Greensboro.... Univ. Md., 1897.	1899	1903
Stanton, D. A., High Point.... Vanderbilt Univ., 1887.	1887	1891
Tankersley, J. W., Greensboro.... Jefferson, 1906.	1906	....
Turner, J. A., High Point.... Louisville Med. Coll., 1886.	1889	1891
Turner, J. P., Greensboro.... Univ. Md., 1896.	1897	1904
Vestal, W. L., High Point.... P. & S., Balto., 1883.	....	1905
Williams, J. A., Greensboro.... Univ. Va., 1898.	1898	1898
Williams, J. R., Greensboro.... Univ. Mich., 1903.	1904	1904
Wilson, A. R., Greensboro.... Jeff. Med., 1882.	1882	1882
Wells, J. M., Pleasant Garden....	....	....
Dees, R. O., Greensboro.... Univ. Md., 1906.	1907	....
Foscue, J. E., Jamestown.... Univ. Md., 1903.	1903	....
Moseley, C. W., Greensboro....	....	....
Duncan, G. F., High Point....	....	....

HALIFAX COUNTY SOCIETY.

President, Jno. A. Collins, Enfield.... Bellevue Med. Coll., 1869.	1880	1904
Secretary, A. S. Harrison, Enfield.... Univ. Md., 1888.	1888	1904
Ferguson, H. B., Halifax.... Jeff. Med. Coll., 1882.	1882	1904
Green, I. E., Weldon....	1873	1904
Leggett, K., Hobgood.... Ky. Sch. Med., 1884.	1885	1885
Pierce, S. B., Roanoke Rapids.... Bellevue Med. Coll., 1897.	1897	1905
Register, F. M., Tillery.... Ky. Sch. Med., 1893.	1891	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Zollicoffer, A. B., Weldon..... Univ. Pa., 1875.	....	1904
Zollicoffer, D. B., Weldon..... P. & S., Balto., 1886.	1886	1904

HARNETT COUNTY SOCIETY.

President, F., Smith, Linden..... S. C. Med. Coll., 1868.	....	1905
Secretary, Wm. P. Holt, Duke..... Jeff. Med. Coll., 1895.	1895	1901
Hicks, I. F., Dunn..... N. C. Med., 1902.	1902	1904
McKay, J. F., Buie's Creek..... S. C. Med. Coll., 1884.	1885	1904
Roland, W. H., Benson..... Non-graduate.	....	1904
Hudson, W. L., Dunn..... Ky. Sch. Med., 1876.	1883	1894
Highsmith, Chas., Dunn..... Balto. Med., 1898.	1898	1898
Lee, S. P. J., Dunn, R. F. D..... Md. Med. Coll., 1904.	1904	1905
Harper, M. W., Dunn..... Louisville Med. Coll., 1886.	1889	1886
Sexton, C. H., Dunn..... Univ. Md., 1890.	1890	1904
Denning, O. L., Dunn..... Jeff. Med. Coll., 1889.	1899	1904
Halford, J. W., Chalybeate Springs..... Columbian Univ., Washington.	....	....
McLean, J. W., Godwin..... N. C. Med. Coll., 1902.	1902	1902
Arnold, L. J., Lillington..... N. C. Med. Coll., 1905.	1905	1906
Melvin, W. C., Linden..... Univ. Coll. Med., Va., 1900.	1900	1905
Moore, F. T., Benson..... P. & S., Balto., 1885.	....	1904
Utley, H. H., Coates..... Balto. Med. Coll., 1906.	1906	....

HAYWOOD COUNTY SOCIETY.

President, R. Lee Allen, Waynesville..... Univ. Md., 1885.	1885	1899
Secretary, J. Howell Way, Waynesville..... Vanderbilt Univ., 1886.	1885	1887

Members and Address.	*Licensed.*	*Joined State Society.*
Secretary, J. F. Abel, Waynesville..... Univ. Balto., 1892.	1893	1899
Davis, F. M., Clyde..... Vanderbilt Univ., 1894.	1894	1904
McCracken, J. Rufus, Waynesville..... N. C. Med. Coll., 1902.	1902	1903
McFadyen, H. L., Waynesville..... Univ. N. Y., 1876.	....	1904
Kirkpatrick, W. L., Pacolet, S. C..... Vanderbilt Univ., 1894.	1894	1895
Mease, J. H., Canton..... Vanderbilt Univ., 1893.	1893	1894
Greenwood, B. H., Waynesville..... Balto. Med. Coll., 1893.	1894	1906
Moore, J. E., Canton..... Tenn. Med. Coll., 1899.	1898	1899
Rogers, McLean, Geary, Okla..... Coll. P. & S., Atlanta, 1902.	1902	1903
Stringfield, Samuel L., Waynesville..... Jeff. Med. Coll., 1905.	1905	1906
Stringfield, Thomas, Waynesville..... Vanderbilt Univ., 1898.	1898	1899
Willis, A. P., Canton..... Univ. N. C., 1905.	1905	1906
Wilson, J. E., Sonoma..... 1 Co. Louisville Med. Coll. 1876.	....	1903
Hyatt, Fred C., Waynesville..... Jeff. Med. Coll., 1907.	1907	1907

HENDERSON-POLK COUNTY SOCIETY.

President, J. S. Brown, Hendersonville..... Northwestern Univ., 1893.	1894	1895
Secretary, Guy E. Dixon, Hendersonville..... P. & S., St. Louis, 1903.	1903	1903
Allen, T. A., Hendersonville..... S. C. Med. Coll.	....	1904
Drafts, A. E., Hendersonville..... Univ. Va., 1896.	1899	1903
Egerton, J. L., Hendersonville..... Univ. Md., 1877.	....	1890
Few, C., Hendersonville..... Univ. Md., 1875.	....	1904
Kirk, Wm. R., Hendersonville..... Cent. Univ. Ky., 1896.	1901	1903
Waldrop, J. G., Hendersonville..... P. & S., Balto., 1876.	....	1891

Members and Address.	*Licensed.*	*Joined State Society.*
Guerard, A. R., Flat Rock Bellevue Med. Coll., 1895.	1902	1905
Greenwood, S. E., Mills River Tenn. Med. Coll., 1902.	1903	1904
Russell, L. P., Fletchers Univ. Nashville, 1901.	1902	1903
Grady, Earle, Tryon Univ. Md., 1894.	1895	1899
Goelet, E. B., Saluda Tulane Univ., 1888.	1888	1888

HERTFORD COUNTY SOCIETY.

President, J. Rainey Parker, Union Univ. Coll. Med., Va., 1898.	1898	1898
Secretary, W. B. Pollard, Winton Univ. Pa., 1899.	1903	1905
Freeman, W. G., Murfreesboro Univ. Pa., 1861.	....	1904
Burbage, T. J., Como Memphis Hosp. Coll. Med., 1882.	....	1905
Gary, R. H., Murfreesboro P & S., Balto., 1881.	....	1904
Green, A. W., Ahoskie Univ. Coll. Med., Va., 1904.	1904	1905
Griffin, C. F., Winton P. & S., Balto., 1893.	1893	1900
Mitchell, J. H., Ahoskie P. & S., Balto., 1879.	....	1904
Ward, J. E., Harrellsville Univ. Mo., 1904.	1904	1905

HYDE COUNTY SOCIETY.

President, E. H. Jones, Swan Quarter	....	....
Secretary, R. E. Windley, Lake Landing Univ. Md., 1903.	1904	1907
Mann, J. O., Fairfield Univ. Va.	....	....
Williams, J. W., Scranton Univ. Md., 1906.	....	1907

IREDELL-ALEXANDER COUNTY.

President, M. R. Adams, Statesville Univ. Md., 1878.	1884	1884
Secretary, J. E. McLaughlin, Statesville Univ. Md., 1886.	1886	1896

Members and Address.	*Licensed.*	*Joined State Society.*
Anderson, T. E., Statesville.... Jeff. Med. Coll., 1878.	....	....
Houck, Albert, Statesville.... P. & S., Balto., 1884.	1891	1893
Long, H. F., Statesville.... Univ. Md., 1892.	1892	1899
Sharpe, F. L., Statesville.... Univ. Coll. Med., 1904.	1904	1905
Yount, E. M., Statesville.... N. C. Med. Coll., 1902.	1902	1902
Bell, A. E., Mooresville.... Univ. Md., 1899.	1897	1904
Moore, N. G., Mooresville.... Jeff. Med. Coll., 1891.	1891	1904
Young, James, Mooresville.... N. C. Med. Coll., 1902.	1896	1904
Stevenson, S. W., Mooresville.... Wash. Univ., Md., 1873.	1879	1904
Moore, J. T., Mooresville, R. F. D. No. 2.... N. C. Med. Coll., 1898.	1898	1905
Cloaninger, L. V., New Stirling.... N. C. Med. Coll., 1901.	1901	1904
Hall, E. A., Statesville, R. F. D. No. 4....	....	1904
Jurney, P. C., Turnersburg.... Med. Coll. Va., 1901.	1901	1904
King, J. E., Statesville, R. F. D. No. 5.... Jeff. Med., 1868.	....	1904
Nicholson, W. G., Harmony.... Louisville Med. Coll., 1881.	....	1904
Klutz, E. E., Troutman.... Med. Coll. Va., 1884.	....	1896
Carpenter, F. A., Mooresville.... N. C. Med. Coll., 1906.	1906	....
Campbell, Arch, Statesville.... Univ. Md., 1899.	1891	1905

JACKSON COUNTY SOCIETY.

President, A. A. Nichols, Painter.... Univ. Nashville, 1898.	1904	1904
Secretary, D. D. Hooper, Sylva.... Univ. Coll. Med., Va., 1905.	1905	1905
Candler, J. M., Dillsboro....	....	1904
Self, Wm., Webster....	....	1904
Candler, Charles Z., Dillsboro.... P. & S., Atlanta, 1901.	1901	1904
Ohlinger, L. B., Balsam.... W. Penn. Med., 1900.	1907	1907

JOHNSTON COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, L. D. Wharton, Smithfield..... Tulane, 1893.	1893	1894
Secretary, Thel. Hooks, Smithfield..... Med. Coll. Va., 1901.	1901	1903
Person, J. B., Selma..... Med. Coll. Va., 1897.	1897	1900
Young, J. J., Clayton..... P. & S., Balto., 1897.	1896	1904
Parker, G. E., Benson..... P. & S., Balto., 1885.	....	1904
Robinson, G. J., Smithfield..... Jefferson, 1882.	1884	1884
Booker, E. N., Clayton, R. F. D..... Med. Coll. Va., 1887.	1888	....
Noble, R. J., Selma..... Ky. Sch. Med., 1875.	1878	1878
Griffin, J. A., Clayton..... P. & S., Balto.	....	1905
Stanley, J. H., Four Oaks..... Univ. N. C., 1904.	1904	1906
Mims, L. A., Smithfield..... P. & S., Balto.	1888	1904
Hocutt, B. A., Clayton..... Univ. N. C., 1906.	1906	....
Rose, A. H., Smithfield..... Jefferson, 1906.	1906	1906
McLemore, G. A., Clayton, R. F. D..... Univ. N. C., 1906.	1906	....
Vick, G. D., Selma..... Jefferson, 1906.	1906	1906
Grady, J. C., Kenley..... P. & S., Balto., 1886.	....	1904

LENOIR COUNTY SOCIETY.

President, J. M. Hodges, LaGrange..... Bellevue Med. Coll., 1883.	1883	1904
Secretary, C. L. Pridgen, Kinston..... Jeff. Med. Coll., 1901.	1901	1901
Tull, Hy., Kinston..... Univ. Pa., 1876.	1876	1876
Wooten, R. W., Kinston..... Univ. Va., 1870.	....	1904
Woodley, C. B., Kinston..... Bellevue Med. Coll., 1886.	1886	1904
Whitaker, R. A., Kinston..... P. & S., Balto., 1885.	1885	1885

Members and Address.	*Licensed.*	*Joined State Society.*
Whitaker, F. A., Kinston	....	....
Hargrove, W. F., Kinston Univ. Md., 1901.	1901	1901
Parrott, J. M., Kinston Tulane Univ., 1895.	1895	1896
Parrott, W. T., Kinston Tulane Univ., 1899.	1899	1901
Smithwick, J. W. P., LaGrange Univ. Md., 1895.	1894	1898
Monk, H. G., Trenton Med. Coll. Va., 1896.	1896	1904

LINCOLN COUNTY SOCIETY.

President, H. N. Abernathy, Denver Louisville Med. Coll., 1894.	1894	1898
Secretary, R. W. Petrie, Lincolnton Univ. Md., 1903.	1903	1903
Crowell, L. A., Lincolnton Balto. Med. Coll., 1892.	1892	1898
Wise, J. S., Lincolnton Ky. Sch. Med., 1890.	1899	1904
Saine, J. W., Lincolnton Louisville Me. Coll., 1891.	1891	1904
Wright, J. W., Lincolnton	....	....
Costner, G. H., Lincolnton	....	. ..
Thompson, C. D., Lowesville Univ. Tenn., 1901.	1901	1904
Hoover, C. H., Lincolnton, R. F. D. Balto. Med. Coll. 1893.	1903	1904
Killian, R. B., Lincolnton, R. F. D. Louisville Med. Coll., 1885.	1885	1904
Kiser, W. C., Reepsville So. Med. Coll., Ga., 1889.	....	1904
Beam, J. L., Crouse Balto. Med. Coll., 1904.	1904	1905

MACON-CLAY COUNTY SOCIETY.

President, S. H. Lyle, Franklin Univ. Nashville.	1882	1904
Secretary, W. H. Rogers, Franklin Univ. Nashville.	1897	1898
Siler, F. L., Franklin Univ. Nashville.	1898	1904

MADISON COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, J. C. Tilson, Marshall, R. F. D. No. 3..... Tenn. Med., 1884-5.	1885	1904
Secretary, W. F. Robinson, Mars Hill..... Vanderbilt Univ., 1896.	1903	1904
Burnette, I. E., Mars Hill..... Tenn. Med. Coll.	1904	1904
Baird, J. H., Mars Hill.....	1885	1904
English, I. L., Faust.....	....	1904
Frisbee, J. T., Spring Creek.....	....	1904
Roberts, Frank, Marshall..... Jeff. Med. Coll.	1892	1902
McDevitte, S. J., Walnut.....	1905	1906
Weaver, W. J., Marshall..... Jeff. Med. Coll.	1897	1903
Woody, S. B., Spring Creek..... Vanderbilt Univ.	1898	1898
Peck, Hot Springs.....	....	....

MARTIN COUNTY SOCIETY.

President, J. H. Saunders, Everetts..... Univ. Coll. Med., Va., 1905.	1905	1906
Secretary, Wm. E. Warren, Williamston.....	1893	1904
Rhodes, J. S., Williamston..... Med. Coll. Va., 1906.	1906	1906
York, H. B., Williamston..... Coll. P. & S., Balto., 1906.	1906	1906
Knight, J. B. H., Williamston..... P. & S., Balto., 1885.	1885	1891
Long, B. L., Hamilton..... Univ. Md., 1880.	....	1904
Smithwick, J. E., Jamesville..... Univ. Md., 1897.	1897	1904
Fleming, Major I., Hamilton..... Jeff. Med., Pa., 1906.	1906	1906
Hargrove, R. H., Robersonville..... Univ. Md., 1877.	1879	1879
Nelson, R. J., Robersonville..... Louisville Med. Coll., 1890.	1890	1893

McDOWELL COUNTY SOCIETY.

President, B. A. Cheek, Marion..... Univ. Pa., 1860.	....	1904
Secretary, Guy S. Kirby, Marion..... Univ. Coll. Med., Va., 1897.	1897	1903

Members and Address.	*Licensed.*	*Joined State Society.*
Ashworth, B. L., Marion P. & S., Balto., 1892.	1893	1895
Gilbert, W. W., Rocky Pass	....	1904
Justice, M. L., Marion Non-Grad. N. C. Med. Coll.	1897	1904
Morphew, M. F., Marion P. & S., Balto., 1883.	....	1893
Freeman, J. W., Old Fort	....	....

MECKLENBURG COUNTY SOCIETY.

President, J. R. Irwin, Charlotte Univ. Md., 1879.	1882	1882
Secretary, W. D. Witherbee, Charlotte McGill Coll., 1899.	1905	1905
Alexander, Annie, Charlotte Woman's Med. Coll., Pa., 1884.	1885	1885
Alexander, H. Q., Matthews Univ. Md., 1888.	1888	1904
Alexander, J. R., Charlotte Univ. Md., 1894.	1894	1898
Austen, J. A., Charlotte Jeff. Med., 1887.	1887	1887
Abernathy, J. S., Charlotte, R. F. D	....	1904
Craven, W. P., Charlotte, R. F. D	....	1904
Crowell, A. J., Charlotte Univ. Md., 1893.	1892	1894
Crowell, S. M., Charlotte Univ. Md., 1895.	1895	1898
Costner, T. F., Charlotte Jeff. Med. Coll., 1882.	....	1892
DeArmond, I. M., Mint Hill Univ. Md., 1886.	1886	1887
Faison, I. W., Charlotte Bellevue Med. Coll., 1878.	1878	1878
Gibbon, R. L., Charlotte Jeff. Med. Coll., 1892.	1891	1893
Graham, Jos., Charlotte Jeff. Med. Coll., 1869.	....	1874
Graham, Wm., Charlotte P. & S., N. Y., 1888.	1889	1890
Hawley, F. O., Charlotte Univ. Edinburg, Scot., 1868.	....	1904
Henderson, S. M., Croft Univ. Md., 1904.	1894	1904
Hovis, L., Charlotte N. C., Med. Coll., 1904.	1904	1906

Members and Address.	*Licensed.*	*Joined State Society.*
Hunter, L. W., Sardis.... Bellevue Med. Coll., 1875.	1880	1880
Herron, A. M., Charlotte.... Med. Coll. S. C ., 1882	....	1904
Knox, Jno., Ranalburg....	....	1904
Keerans, L. C., Charlotte.... Univ. Md., 1902.	1906	1906
King, P. M., Charlotte.... Univ. and Bellevue, N. Y., 1902.	1902	1904
McLaughlin, C. S., Charlotte.... Univ., 1896.	1903	1903
McManaway, C. G., Charlotte....	....	....
Meisenheimer, C. A., Charlotte.... Univ. N. Y., 1882.	1882	1882
Montgomery, J. C., Charlotte.... Univ. N. Y., 1891.	1891	1891
Moore, B. S., Charlotte.... Univ. Virginia, 1905.	1905	1905
Monroe, J. P., Charlotte.... Univ. Va., 1885.	1886	1890
Matthewson, J. P., Charlotte.... N. C. Med. Coll., 1902; Univ. Md., 1905.	1902	....
Nesbit, W. O., Charlotte.... Med. Coll. S. C., 1889.	1889	1899
Nalle, B. C., Charlotte.... Univ. Va., 1903.	1905	1905
Newell, L. B., Charlotte.... Univ. Va., 1905.	1906	1906
Pharr, W. W., Charlotte.... P. & S., Balto., 1881.	1885	1885
Pressley, G. W., Charlotte.... Jeff. Med. Coll., 1892.	1895	1896
Register, E. C., Charlotte.... Univ. N. Y., 1885.	1885	1887
Reed, W. R., Pineville....	....	....
Russell, E. R., Charlotte.... Univ. Md., 1895.	1895	1898
Stephenson, C. B., Charlotte.... Tulane Univ., La., 1891.	1898	1904
Strong, C. M., Charlotte.... Univ. Md., 1898.	1889	1898
Strong, W. M., Charlotte.... N. C. Med. Coll., 1904.	1904	1904
Walker, C. E., Charlotte.... Univ. Md., 1891.	1891	1894
Wakefield, W. H., Charlotte.... Hosp. Coll. Med., Ky., 1890.	1891	1893

Members and Address.	*Licensed.*	*Joined State Society.*
Winchester, F. M., Charlotte..... Jeff. Med. Coll., 1883.	1887	1904
Whisnant, A. M., Charlotte..... P. & S., Balto., 1893.	1893	1894
Witherspoon, B. J., Charlotte..... S. C. Med., 1894.	....	1906
Wilder, H. M., Charlotte..... Univ. N. Y., 1872.	1874	1904
Woodley, W. F., Charlotte..... Med. Coll. Va., 1893.	....	1904
Wright, Thos., Charlotte..... Univ. Va., 1901.	....	1904
Gibbon, J. H., Philadelphia, Pa.....	. ..	....

MITCHELL COUNTY SOCIETY.

President, R. H. Penland, Bakersville.....	....	....
Secretary, C. G. Bryant, Spruce Pine..... Louisville Med. Coll., 1894.	1902	....
Butt, V. R., Bakersville..... P. & S., Balto., 1882.	1885	....
Sloop, E. H., Plumtree..... N. C. Med., 1905.	1905	....

MONTGOMERY COUNTY SOCIETY.

President, F. E. Asbury, Asbury..... S. C., 1876.	1885	1896
Secretary, Charles Daligny, Troy..... Military Med. School, Paris, France, 1878.	1885	1906
Thompson, A. F., Troy..... Indiana, 1895.	1895	1904
Shamburger, J. B., Star..... Md., 1890.	1890	1892
Ingram, Chas. B., Mt. Gilead..... Pa., 1886.	1886	1902
Bowman, H. E., Biscoe..... N. C., 1905.	1904	1906

MOORE COUNTY SOCIETY.

President, Wm. P. Swett, Southern Pines..... Univ. Vermont, 1896.	....	1901
Secretary, Gilbert McLeod, Carthage..... Univ. Md., 1882.	1885	1904
Blair, A. McNeill, Southern Pines.....	....	....
Bloomfield, W. A., Southern Pines.....	....	....
Caviness, A. H., High Falls..... Univ. Balto., 1901.	1903	1905

Members and Address.	*Licensed.*	*Joined State Society.*
Ferguson, K. M., Southern Pines.... P. & S., Balto., 1882.	1883	1904
Gladmon, Edwin, Southern Pines.... Nat. Univ., Wash., D. C., 1890.	1899	1902
Gilmore, W. D., Mt. Gilead.... Univ. N. C., 1903.	1903	1904
Hoyle, H. B., Jonesboro.... N. C., Med. Coll., 1896.	1896	1904
Laster, P. D., Moncure....	....	....
McIver, Lynn, Sanford.... Univ. Ky., 1901.	1902	1903
McLeod, A. H., Aberdeen.... Balto. Med. Coll., 1896.	1896	1904
Matthews, M. L., Cameron.... Univ. N. C., 1903.	1903	1904
Monroe, A. J., Jonesboro.... Univ. N. Y., 1858.	....	1904
Monroe, J. P., Sanford.... P. & S., Balto., 1901.	1901	1903
Monroe, W. A., Sanford.... Univ. Md., 1886.	1886	1888
Palmer, Robt. W., Gulf.... Louisville Med. Coll., 1890.	1891	1891
Sheppard, J. L., Sanford, R. F. D....	....	....
Shields, H. B., Carthage.... Atlanta Med. Coll., 1887.	1887	1904
Snipes, E. P., Jonesboro.... Vanderbilt Univ., 1890.	....	1890
Street, M. E., Glendon.... P. & S., Balto., 1893.	1893	1902
Watson, Leon, Broadway.... N. C. Med. Coll., 1900.	1900	1904
Willcox, J. W., Carthage.... Univ. N. C., 1906.	1906	1906

NEW HANOVER COUNTY.

President, J. Akerman, Wilmington.... Johns Hopkins, 1905.	1905	1906
Secretary, Charles T. Harper, Wilmington.... Univ. Md., 1894.	1893	1904
Hall, Wright, Wilmington....	....	....
Schonwold, Jno. T., Wilmington.... Long Is. Med., 1879.	1880	1904
Honnett, Harry, Wilmington.... P. & S., N. Y., 1900.	1901	1904
Bell, C. D., Wilmington.... Univ. Md., 1883.	....	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Cranmer, Jno. B., Wilmington Univ. N. C., 1905.	1905	1906
Hyatt, H. A., Wilmington	....	....
Russell, F. H., Wilmington Univ. Md., 1893.	1893	1895
Caldwell, M. M., Wilmington	....	....
Wood, Ed. J., Wilmington Univ. Pa., 1902.	1903	1903
Green, Thos. M., Wilmington Univ. Md., 1901.	1901	1904
Harris, A. H., Wilmington Medico-Chi. Coll., Pa., 1893.	1892	1904
Bellamy, R. H., Wilmington Jeff. Med. Coll., 1902.	1902	1902
Thomas, Geo. G., Wilmington Univ. Md., 1871.	1871	1871
Bellamy, W. J. H., Wilmington Univ. N. Y., 1868.	....	1870
Thomas, P. J., Wilmington Univ. Md., 1902.	1902	1902
Koonce, S. E., Wilmington P. & S., Balto., 1896.	1896	1900

NORTHAMPTON COUNTY SOCIETY.

President, A. J. Ellis, Garysburg Univ. Pa., 1858.	....	1904
Secretary, R. P. Morehead, Lasker P. & S., Balto., 1895.	1895	1900
Bolton, M., Rich Square Jeff. Med. Coll., 1885.	1885	1885
Lewis, H. W., Jackson Univ. N. Y., 1877.	....	1887
Coppedge, N. P., Margaretsville N. C. Med. Coll., 1903.	1903	1903
Joyner, R. W., Woodland	....	....
Stancell, R. H., Margarettsville Med. Coll. Va., 1865.	....	1887
Cook, J. H., Woodland Univ. N. C., 1905.	....	....
Reed, D. H., Conway	....	....
Joyner, T. D., Severn	....	....

ONSLOW COUNTY SOCIETY.

President, C. W. Sutton, Richlands	....	....
Secretary, J. L. Nicholson, Richlands Univ. N. Y., 1875.	1880	1880

Members and Address.	*Licensed.*	*Joined State Society.*
Thompson, Cyrus, Jacksonville..... Tulane Univ., La., 1878.	....	1904
Cox, E. L., Jacksonville..... Univ. Md., 1889.	1889	1892
Montford, W. J., Swansboro..... Jeff. Med. Coll., 1857.	....	1904
Blount, F. H., Swansboro.....	....	1904
Dudley, Geo., Snead's Ferry..... Univ. Md., 1898.	....	1904

PAMLICO COUNTY SOCIETY.

President, G. S. Atmore, Stonewall..... Wash. Univ., 1870.	1870	1904
Secretary, H. P. Underhill, Bayboro..... Univ. Coll. Med., 1901.	1901	1904
Dees, D. A., Bayboro..... Balto. Med. Coll., 1903.	1903	1905
Daniels, O. C., Oriental..... Med. Coll., Va., 1903.	1903	1904

PASQUOTANK-CAMDEN-DARE COUNTY SOCIETY.

President, J. E. Wood, Elizabeth City..... Wash. Univ., Md., 1869.	....	1904
Secretary, H. T. Aydlett, Elizabeth City..... Univ. Va., 1894.	1895	1896
Lumsden, W. J., Elizabeth City..... Univ. Md., 1869.	....	1888
McMullan, O., Elizabeth City..... Univ. Va., 1880.	....	1889
Sawyer, C. W., Elizabeth City..... Univ. Md., 1886.	....	1904
Fearing, I., Elizabeth City..... P. & S., Balto., 1896.	1896	1904
Fearing, Z., Elizabeth City..... Univ. Med. Coll., 1901.	1901	1904
Williams, C. B., Elizabeth City..... Univ. Coll. Med., Va., 1903.	1903	1906
Griggs, J. B., Elizabeth City..... Univ. Md., 1892.	1892	1904
Lister, J. L., South Mills (Camden Co.).....	....	....
Walker, H. D., Elizabeth City..... Univ. Md., 1902.	1902	1902

PENDER COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
Secretary, R. H. Bradford, Burgaw..... N. C. Med. Coll., 1894.	1904	1905
Williams, R. J., Rocky Point..... Jeff. Med. Coll., 1893.	1893	1904
Alexander, R. L., Topsail Sound..... Univ. N. Y., 1864.	....	1904

PERQUIMANS COUNTY SOCIETY.

President, Wm. Riddick, Hertford..... University Pennsylvania.	1854	1904
Secretary, R. W. Smith, Hertford..... Univ. Md., 1902.	1892	1904
White, Thos. N., Belvidere..... P. & S., Balto.	1875	1905
McMullan, Thos. S., Hertford..... Univ. Va.	1889	....

PERSON COUNTY SOCIETY.

President, J. A. Wise, Roxboro..... P. & S., Balto., 1886.	1885	1904
Secretary, W. A. Bradsher, Roxboro..... Univ. Md., 1904.	1904	1905
Nichols, C. G., Roxboro..... 1 1-2 co., 1873-1874, Fall 1880.	1885	1891
Schaub, O. P., Roxboro..... Balto. Med. Coll., 1898.	1898	1898
Long, W. T., Roxboro..... Balto. Med. Coll., 1905.	1905	....
Baynes, R. S., Gordonton..... P. & S., Balto., 1881.	1881	1904
Boyles, A. C., Mt. Tirzah..... Univ. Md.	....	1904
Swann, J. F., Semora..... P. & S., Balto., 1898.	1898	1904

PITT COUNTY SOCIETY.

President, C. C. Joyner, Farmville..... Jeff. Med. Coll., 1899.	1899	1904
Secretary, Jos. E. Nobles, Greenville..... Jeff. Med. Coll., 1899.	1899	1902
Bagwell, W. H., Greenville..... P. & S., Balto., 1883.	1885	1887
Basnight, T. G., Stokes..... Univ. Md., 1904.	1905	1906

Members and Address.	*Licensed.*	*Joined State Society.*
Brown, Zeno, Greenville..... Bellevue Med. Coll., 1883.	1885	1885
Cox, B. T., Winterville..... Univ. Md., 1888.	1888	1888
Dawson, W. W., Grifton..... Univ. Md., 1897.	1897	1900
Dixon, Jos., Ayden..... Med. Coll. Va., 1894.	1893	1895
Fountain, Wm., Greenville..... Univ. Coll. Med., Va., 1898.	1899	1899
Grimes, R. J., Bethel..... Univ. Pa., 1876.	1876	1904
James, F. C., Bethel..... Columbian Univ., D. C., 1859.	....	1894
Jones, C. M., Grimesland..... Univ. Md., 1892.	1892	1895
Laughinghouse, Chas. O'H., Greenville..... Univ. Pa., 1893.	1893	1894
Morrill, D. S., Farmville..... Balto Med. Coll., 1897.	1897	1904
Morrill, Jenness, Falkland..... Univ. Md., 1888.	1888	1904
Moye, E. A., Greenville..... Jeff. Med. Coll., 1895.	1895	1897
Ricks, L. E., Shelmerdine..... Med. Coll. Va., 1896.	1896	1898
Skinner, L. C., Ayden..... Univ. Md., 1901.	1901	1902
Thigpen, G. F., Bethel..... Univ. Md., 1903.	1903	1904
Whitfield, Wm. Cobb, Grifton..... Univ. Md., 1884.	1884	1884

RANDOLPH COUNTY SOCIETY.

President, Sam'l A. Henly, Ashboro..... Attended Jeff. Med., 1861.	....	1888
Secretary, C. C. Hubbard, Worthville..... Jeff. Med. Coll., 1888.	1890	1904
Fox, Thomas I., Franklinsville..... Vanderbilt Univ., 1894.	1899	1904
Hunter, R. Victor, Ashboro..... Univ. Louisville, 1898.	1898	1905
Lewis, C. H., Farmer..... Jeff. Med. Coll., 1878.	....	1904
Moore, W. J., Ashboro..... P. & S., Balto., 1892.	1893	1901

Members and Address.	*Licensed.*	*Joined State Society.*
Redding, A. H., Randleman, R. F. D. No. 2 P. & S., Balto., 1897.	.....	1904
Summer, W. I., Randleman Univ. Tenn., 1893.	1894	1894

RICHMOND COUNTY SOCIETY.

President, H. F. Kinsman, Hamlet Univ. Vermont, 1894.	1897	1904
Secretary, E. C. McEachern, Cordova Univ. Md., 1901.	1901	1905
Ledbetter, J. M., Rockingham Vanderbilt, 1894.	1894	1903
Everett, A. C., Pegues Univ. Md., 1897.	1897	1903
Folkes, J. I., Hamlet P. & S., Atlanta, 1903.	1903	1903
Garrett, F. J., Rockingham Univ. Md., 1889.	1887	1904
Hunter, N. C., Rockingham P. & S., Atlanta, 1901.	1901	1904
McPhail, L. D., Rockingham Univ. Md., 1900.	1900	1902
Steele, W. H., Rockingham Bellevue Med. Coll., 1874.	1874	1904
Webb, W. P., Rockingham Med. Coll. S. C., 1897.	1897	1904
Williamson, J. H., Pegues Bellevue Med. Coll.	1859	1904

ROBESON COUNTY SOCIETY.

President, B. F. McMillan, Red Springs Univ. Md., 1882.	1884	1884
Secretary, N. A. Thompson, Lumberton	....	....
Norment, R. M., Lumberton Univ. Md., 1893.	1893	1904
Norment, T. A., Rowland N. C. Med. Coll., 1894.	1893	1904
Brown, J. P., Ashpole Univ. Md., 1883.	....	1904
Croom, J. D., Maxton Med. Coll. S. C., 1876.	....	1887
Croom, A. B., Maxton Univ. Md., 1905.	1905	1906
Curry, D. S., Maxton N. C. Med. Coll., 1906.	1906	1906
Dickson, A. P., Raeford Univ. N. Y., 1878.	....	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Evans, Wm. E., Rowland Med. Coll. Va., 1894.	1894	1904
Hodgin, H. H., Red Springs N. C. Med. Coll., 1906.	1906	1906
Kirkpatrick, L. R., Maxton N. C. Med. Coll., 1902.	1902	1902
McKinnon, W. H., Red Springs Bellevue Med. Coll., 1870.	....	1905
McMillan, J. D., Lumberton Jeff. Med. Cooll., 1876.	1876	1876
McMillan, J. L., Red Springs Univ. Md., 1881.	1881	1902
McNatt, H. W., Maxton Univ. Md., 1881.	....	1905
McPhail, W. P., Ashpole Univ. Nashville, 1905.	1905	1906
Northrup, T. L., St. Paul's Univ. Md., 1897.	1897	1903
Pate, G. M., Rowland Med. Coll. S. C., 1900.	1900	1905
Pope, H. I., Lumberton N. C. Med. Coll., 1894.	1893	1902
Rowland, W. H., Kingsdale Non-graduate.	....	1904
Reedy, Howard, Rowland Med. Coll. S. C., 1884.	....	1904
Rosier, R. G., Lumberton Univ. Md., 1899.	1899	1904
Rosier, S. B., Lumberton, R. F. D Med. Coll. Va., 1855.	....	1904
Stamps, Thomas, Lumber Bridge Univ. Louisville, 1888.	1888	1888
Stephens, Wm. F., Ashpole Tenn. Med. Coll., 1907.	1898	1904
McPhail, W. A., Ashpole Univ. Nashville, 1905.	1905	1906
McKinzie, Boonesville	....	....
Knox, John, Lumberton	....	....
Beckwith, R. B., Lumberton	....	....
Currie, D. S., Parkton N. C. Med. Coll., 1906.	1906	1906
Gibson, M. R., Maxton	....	....

ROCKINGHAM COUNTY SOCIETY.

President, J. R. Smith, Stoneville	....	....
Secretary, J. W. McGhee, Reidsville Univ. Md., 1904.	1904	1905

Members and Address.	*Licensed.*	*Joined State Society.*
Balsley, T. E., Reidsville	....	....
Mills, J. C., Reidsville	....	....
Jett, S. G., Reidsville (temporary) Univ. Med. Coll., 1904.	....	....
Ellington, S. B., Wentworth Jefferson Med. Coll., 1877.	....	1904
Steward, J. T., Summerfield, R. F. D.	1898	1898
Wharton, C. R., Ruffin Med. Coll. Va., 1897.	1897	1904
Matheson, R. C., Madison P. & S., Balto.	1891	1904
Baird, C. A., Madison N. C. Med. Coll., 1904.	1904	1905
Ray, J. B., Leaksville	....	....
Sweeney, John, Leaksville	....	....
Boaz, T. A., Stoneville P. & S., Balto., 1892.	1892	1905
Dicks, J. F., Stoneville Univ. Med. Coll., Va., 1901.	1901	1905
Tuttle, A. F., Leaksville N. C. Med., 1901.	1901	1906
John, A. B., Leaksville	....	....

ROWAN COUNTY SOCIETY.

President, J. E. Stokes, Salisbury Univ. Med., 1892.	1900	1901
Secretary, R. V. Brawley, Salisbury Univ. Coll. Med., Va., 1900.	1900	1904
Bowers, A. H., Crescent Univ. Coll. Med., 1906.	....	....
Brown, G. A., Bear Poplar Univ. Coll. Med., Va., 1897.	1897	1898
Busby, J. G., Spencer Univ. Md., 1904.	1904	1905
Caldwell, J. A., Salisbury Univ. Pa., 1854.	....	1904
Chenault, W. F., Cleveland Univ. Md., 1888.	1888	1891
Councill, J. B., Salisbury P. & S., Balto., 1885.	1885	1904
Crump, W. L., Salisbury Jeff. Med. Coll., 1879.	1881	1904
Dorsett, E. Rose, Salisbury Jeff. Med. Coll., 1869.	....	1904
Fitzgerald, J. F., Gold Hill Jeff. Med. Coll., 1889.	1889	1906

Members and Address.	*Licensed.*	*Joined State Society.*
Flippin, J. M., Salisbury..... P. & S., Balto., 1884.	....	1893
Foust, I. H., Salisbury..... Vanderbilt Univ., 1899.	1898	1904
Gaither, J. B., China Grove..... P. & S., Balto., 1869.	....	1904
Goodman, A.B., Crescent..... N. C. Med. Coll., 1898.	1897	1904
Heathman, J. D., Woodleaf..... Univ. Md., third course, 1899.	1899	1904
Heilig, H. G., Salisbury..... Univ. Md., 1899.	1899	1904
McKenzie, W. W., Salisbury..... Jeff. Med. Coll., 1893.	1893	1894
Monk, H. L., Spencer..... Med. Coll. Va., 1897.	1899	1903
Peeler, J. H., Granite Quarry..... Univ. Coll. Med., Va., 1899.	1899	1904
Poole, C. M., Craven..... P. & S., Balto., 1880.	1880	1880
Ramsaur, G. A., Craven..... Jeff. Med. Coll., 1880.	....	1898
Smoot, M. L., Spencer..... Univ. Coll. Med., Va., 1903.	1903	1904
Sawyer, C. J., Salisbury..... P. & S., Balto., 1895.	1895	1897
Summerell, E. M., Mill Bridge..... Univ. Pa., 1883.	1883	1883
Trantham, H. T., Salisbury..... Univ. N. Y., 1875.	1878	1879
West, R. M., Salisbury..... Med. Coll. Va., 1900.	1900	1904
Whitehead, John, Salisbury..... Univ. Pa., 1880.	1880	1880
Woodson, Chas. W., Salisbury.....	....	....
Withers, Banks, China Grove, R. F. D..... P. & S., N. Y., 1905.	....	....
Cowan, R. L., Salisbury.....	....	....

RUTHERFORD COUNTY SOCIETY.

President, G. E. Young, Forest City.....	....	1904
Secretary, E. B. Harris, Rutherfordton..... P. & S., Balto.	....	1904
Andrews, R. M., Cliffdale..... Memp. Hosp. Coll. Med., 1904.	1904	1905

Members and Address.	*Licensed.*	*Joined State Society.*
Chapman, G. M., Logan's Store..... Grant Univ., Tenn., 1904.	1904	1905
Hamrick, T. G., Caroleen..... P. & S., Balto., 1895.	1895	1904
Hicks, R., Henrietta..... So. Med. Coll., Ga., 1888.	....	1899
Hicks, O., Caroleen..... Med. Coll. Va.	....	1904
Harrill, L. B., Caroleen..... Grant Univ., Tenn.	....	1904
Jonas, J. F., Thermal City..... Balto. Med. Coll., 1903.	1903	1903
Lovelace, T. B., Henrietta..... P. & S., Balto., 1883.	....	1904
Reid, G. P., Forest City..... Univ. Coll. Med., Va., 1895.	1894	1899
Twitty, T. B., Rutherfordton..... Univ. N. Y., 1 year, 1863.	....	1904
Twitty, J. C., Rutherfordton..... Balto. Med. Coll., 1892.	1892	1906
Thompson, W. A., Rutherfordton..... P. & S., Balto.	....	1904
Thompson, J. B., Cliffdale..... Coll. P. & S., Balto., 1898.	1898	1904
Wiseman, C. B., Henrietta..... P. & S., Balto., 1902.	1902	1902
Haynes, B. M., Cliffside..... N. C. Med. Coll., 1905.	1905	1906
Bostic, W. C., Forest City..... N. C. Med. Coll., 1905.	1905	1906
Simmons, J. O., Charlotte, R. F. D..... Chattanooga.	1894	1906

SAMPSON COUNTY SOCIETY.

President, R. B. Wilson, Newton Grove..... Ky. Sch. Med., 1889.	1890	1904
Cooper, G. M., Clinton..... Univ. Coll. Med., Va., 1905.	1905	1906
Holmes, F. H., Clinton..... Univ. Md., 1895.	1895	1896
Lee, A. M., Clinton..... Med. Coll. Va., 1862.	....	1904
Lee, R. E., Clinton..... Univ. Md., 1896.	1896	1900
Stevens, J. A., Clinton..... Jeff. Med. Coll., 1883.	1883	1883

Members and Address.	*Licensed.*	*Joined State Society.*
Holliday, R. H., Clinton 1 course Wash. Univ., 1868.	....	1904
Matthews, J. O., Clinton Univ. Coll. Med., Va., 1897.	1897	1902
Taylor, W. I., Kerr N. C. Med. Coll., 1902.	1904	1905
Kerr, C. S., Kerr Univ. Md., 1869.	....	1904
Sloan, Henry, Ingold S. C. Med. Coll., 1881.	1885	1902
Cooper, F. J., Roseboro P. & S., Balto., 1884.	1885	1904
Sikes, G. L., Salemburg Univ. Coll. Med., Va., 1900.	1900	1904
McLean, R. H., Dunn, R. F. D. No. 6 P. & S., Balto., 1882.	....	....

SCOTLAND COUNTY SOCIETY.

President, D. M. Prince, Laurinburg S. C. Med. Coll., 1875.	1878	1879
Secretary, A. W. Hamer, Laurinburg S. C. Med. Coll., 1858.	1886	1904
Pate, W. T., Gibson Coll. P. & S., Balto., 1885.	1885	1885
Blue, Z. A., Laurinburg Univ. Md., 1889.	1890	1892
John, Peter, Laurinburg Univ. Md., 1897.	1897	1904
McLean, N. M., Gibson Univ. Md., 1883.	1883	1888
Shaw, W. G., Fontcol P. & S., Balto., 1892.	1895	1904
Everington, G. D., Laurinburg N. C. Med. Coll., 1899.	1898	1898
Gibson, John S., Gibson Univ. Md., 1906.	1906	1906

STANLY COUNTY SOCIETY.

President, V. A. Whitley, Albemarle Univ. Md., 1884.	1884	1904
Secretary, J. M. Lilly, Norwood Univ. Coll. Med., 1903.	1903	1904
Anderson, J. N., Albemarle Univ. Md., 1895.	1895	1904
King, O. D., Albemarle Long Island Hosp. Med. Coll., 1884.	1884	1887

Members and Address.	*Licensed.*	*Joined State Society.*
Hill, W. I., Albemarle Univ. Md., 1897.	1897	1904
Hartsell, T. E., Big Lick Balto. Med., 1895.	1895	1905
Hathcock, T. A., Norwood Univ. Md., 1893.	1893	1904
Allen, J. A., New London Univ. Coll. Med., 1901.	1901	1906
Whitley, D. P., Millingport Univ. Md., 1889.	1890	1898
Campbell, J. I., Whitney Undergraduate N. C. Med.	1898	1904
Hall, J. Clegg, Albemarle	....	....
Cox, B. F., Palmersville Coll. P. & S., Balto.	1886	....

STOKES COUNTY SOCIETY.

President,	....	....
Secretary, E. Fulp, Fulp Univ. N., 1882.	....	1896
Moore, W. B., Smith P. & S., Balto., 1893.	1893	1904
Moir, S. A., Francisco P. & S., Balto., 1888.	....	1904
Leak, J. J., Brim Univ. Coll. Med., Va., 1901.	....	1904
Jones, A. G., Walnut Cove Univ. N. Y.	....	1904

SURRY COUNTY SOCIETY.

President, J. B. Smith, Pilot Mountain P. & S., Balto., 1885.	....	1896
Secretary, E. M. Hollingsworth, Mt. Airy P. & S., Balto., 1886.	1886	1904
Allred, E. W., Mt. Airy Jeff. Med. Coll., 1877.	....	1904
Ashby, T. B., Mt. Airy P. & S., Balto., 1885.	1885	1896
S. T. Flippen, Siloam N. C. Med. Coll., 1898.	1898	1898
Flippen, R. E. L., Pilot Mountain Balto. Med. Coll., 1897.	1897	1901
Folger, W. C., Dobson Barnes's Med. Coll., Mo.	1892	1904
Hollingsworth, J. M., Mt. Airy P. & S ., Balto., 1886.	1886	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Hollingsworth, R. E., Mt. Airy..... Univ. Coll. Med., Va., 1898.	1899	1904
Hollingsworth, J. B., Mt. Airy..... Jeff. Med. Coll., 1880.	....	1905
Reece, J. M., Elkin..... P. & S., Balto., 1886.	....	1904
Ring, J. W., Elkin..... P. & S., Balto., 1880.	....	1904
Taylor, W. S., Mt. Airy..... Jeff. Med. Coll., 1874.	....	1894
Thompson, K., Ladonia..... Jeff. Med. Coll., 1858.	....	1904
Waltz, John L., Pilot Mountain..... So. Med. Coll., Ga., 1897.	1902	1904
Woltz, John R., Dobson.....	....	1904
Mebane, W. C., Mt. Airy..... N. C. Med., 1905.	1905	....
Stone, W. M., Dobson..... N. C. Med., 1906.	1906	....

SWAIN COUNTY SOCIETY.

President, R. L. Davis, Bryson City..... So. Med. Coll., Ga., 1891.	....	1903
Secretary, A. M. Bennett, Bryson City..... 1 year Louisville Med. Coll.	1885	1899
Bryson, D. R., Bryson City..... Univ. Md., 1900.	1900	1904
League, J. H., Whittier..... Non-grad. Jeff. Med., 1881.	1885	1904
Holt, R. D., Cherokee..... Med. Coll. Va., 1899.	1889	1904
Cooper, J. A., Almond.....	....	1904

TRANSYLVANIA COUNTY SOCIETY.

President, W. J. Wallis, Brevard..... P. & S., Balto., 1892.	1897	1904
Secretary, Goode Cheatham, Brevard..... N. C. Med. Coll., 1895.	1895	1896
Lyday, W. M., Penrose..... P. & S., Balto., 1885.	1885	....
English, E. S., Brevard..... Univ. of South, 1901.	1902	1904

UNION COUNTY SOCIETY.

President, H. C. Houston, Waxhaw..... Univ. Nashville, 1899.	1899	1903
Secretary, J. W. Neal, Monroe..... Univ. N. Y., 1884.	1887	1904

Members and Address.	*Licensed.*	*Joined State Society.*
Armfield, R., Marshville.... Med. Coll. Va., 1881.	....	1904
Ashcraft, J. E., Monroe.... Univ. N. Y., 1887.	1887	1888
Blair, J. M., Monroe.... Louisville Med. Coll., 1887.	....	1898
Blair, M. P., Marshville.... Med. Coll. Va., 1895.	1904	....
Dees, W. A., Marshville.... Univ. Ga., 1891.	1893	1904
Eubanks, J. B., Monroe, R. F. D. No. 1.... Vanderbilt Univ., 1887.	....	1904
Jerome, J. R., Wingate.... Univ. Md., 1890.	1904	....
McCain, W. R., Waxhaw.... Univ. Md., 1897.	1898	1906
Nance, G. B., Monroe.... Jeff. Med. Coll., 1885.	1885	1904
Perkins, D. R., Marshville, R. F. D. No. 3.... Balto. Med. Coll., 1903.	1906	1906
Price, W. H., Wardlaw....	....	1904
Roberson, R. M., Waxhaw.... Univ. Coll. Med., Va., 1899.	1904	1905
Stevens, S. A., Monroe.... Univ. Md., 1900.	1898	1904
Stewart, H. D., Monroe.... Univ. Md., 1898.	1898	1904
Whitley, A. D. N., Unionville.... Non-Grad. Univ. Md.	1897	1904

VANCE COUNTY SOCIETY.

President, R. S. Pendleton, Henderson.... Univ. Pa., 1895.	1898	1899
Secretary, John Hill Tucker, Henderson.... Univ. Va., 1899.	1899	1904
Harris, F. R., Henderson.... Univ. Va., 1881.	1882	1883
Gill, R. J., Henderson.... Univ. Pa., 1867.	1868	1883
Bass, H. H., Henderson.... Univ. Coll. Med., Va., 1899.	1899	1900
McAllister, Wm., Middleburg.... P. & S., Balto., 1890.	1890	1904
Alston, B. P., Henderson.... Univ. Md., 1868.	....	1868
Fenner,, E. F., Henderson.... Univ. Md., Balto., 1905.	1906	....

WAKE COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, J. M. Templeton, Cary.... Balto. Med. Coll., 1882.	1882	1904
Secretary, W. C. Horton, Raleigh.... P. & S., Balto., 1897.	1896	1904
Abernethy, C. O., Raleigh.... Univ. N. C., 1906.	1906	1906
Battle, K. P., Jr., Raleigh.... Univ. Va., 1881; Bellevue, 1882.	1882	1882
Bell, G. M., Wakefield.... P. & S., Balto., 1880.	....	1903
Blalock, N. M., Gulley's Mills.... P. & S., Balto., 1890.	1890	1904
Boone, W. H., Morrisville.... N. C. Med. Coll., 1902.	1902	1904
Buffalo, J. S., Garner.... Balto. Med. Coll., 1900.	1900	1904
Burt, B. W., Enno.... P. & S., Balto., 1886.	1886	....
Caveness, Z. M., Wakefield.... Univ. N. C., 1903.	1903	1903
Dixon-Carroll, E. Delia, Raleigh.... Woman's Med., N. Y., 1895.	1900	1900
Dowd, C. F., Willow Springs.... Univ. Pa., 1867.	....	1904
Ferebee, E. B., Raleigh.... P. & S., Balto., 1885.	1885	1903
Fowler, M. L., Rolesville.... P. & S., Balto., 1881.	....	1904
Gaines, Lewis M., Wake Forest.... Johns Hopkins, 1903.	1906	1906
Goodwin, A. W., Raleigh.... Bellevue Med. Coll., 1887.	1887	1887
Harris, H. H., Wake Forest.... Univ. Pa., 1860.	1860	1886
Hayden, Catherine P., Raleigh.... Univ. Colo., 1894.	1902	1904
Haywood, F. J., Raleigh.... Bellevue Med. Coll., 1868.	....	1898
Haywood, Hubert, Raleigh.... Bellevue Med. Coll., 1879.	....	1904
Hines, P. E., Raleigh.... Univ. Pa., 1852.	....	1853
Holding, S. P., Wake Forest.... Bellevue Med. Coll., 1897.	1897	1904
Jenkins, C. L., Raleigh.... Univ. N. Y., 1890.	1890	1892

Members and Address.	*Licensed.*	*Joined State Society.*
Johnson, R. W., Apex..... Univ. Tenn., 1900.	1901	1904
Jordan, T. M., Raleigh..... P. & S., Balto., 1881.	1881	1881
Judd, J. M., Cardenas..... Balto. Med. Coll., 1897.	1898	1901
Knox, A. W., Raleigh..... Bellevue Med. Coll., 1874.	1878	1880
Lewis, R. H., Raleigh..... Univ. Md., 1871.	1877	1877
Marshburn, B. D., Raleigh, R. F. D. No. 7..... Non-Grad. P. & S., Balto., 1875-6.	....	1904
Marshburn, H. H., Neuse, R. F. D. No. 2..... P. & S., Balto., 1876.	....	1904
McCullers, J. J. L., McCullers..... P. & S., Balto., 1886.	1886	1904
McGeachy, R. S., Raleigh..... Bellevue Med. Coll., 1894.	1894	1895
McGee, J. W., Sr., Raleigh..... Univ. Pa., 1860.	1860	1865
McGee, J. W., Jr., Raleigh..... Bellevue Med. Coll., 1888.	1888	1888
Moncure, Wm., Raleigh..... Univ. Pa., 1904.	1905	1906
Penny, J. A. J., Vanteen..... Univ. N. Y., 1861.	....	1904
Powers, J. B., Wake Forest..... Long Island Med. Coll., 1878.	1885	1904
Ray, O. L., Bangor..... Univ. Coll. Med., Va., 1899.	1899	1904
Rankin, W. S., Wake Forest..... Univ. Md., 1901.	1901	1901
Rogers, Jas. R., Raleigh..... P. & S., Balto., 1886.	1886	1904
Royster, H. A., Raleigh..... Univ. Pa., 1894.	1894	1895
Royster, W. I., Raleigh..... Bellevue Med. Coll., 1869.	1869	1871
Sexton, J. A., Fuquay Springs.....	....	....
Sorrell, L. P. Flint..... Med. Coll. Va., 1875.	....	1904
Stephens, Ralph S., Raleigh..... Univ. N. C., 1905.	1905	1906
Thompson, S. W., Falls..... Med. Coll. Va., 1875.	....	1904
Tucker, H. McKee, Raleigh..... Univ. Md., 1899.	1899	1899

Members and Address.	*Licensed.*	*Joined State Society.*
Utley, B. S., Holly Springs P. & S., Balto., 1878.	....	1886
Young, L.B., Rolesville	....	....

WASHINGTON COUNTY SOCIETY.

President, W. H. Hardison, Creswell Wash. Univ. Md., 1870.	....	1904
Secretary, J. L. Hassell, Creswell P. & S., Balto., 1886.	....	1904
Ward, W. H., Plymouth Univ. Md., 1881.	1886	1900
Spruill, J. L., Columbia Univ. Md., 1895.	1895	1906
Cohen, B. W., Columbia Med. Coll. Va., 1884.	....	1906
Speight, J. W., Roper Ky. Sch. Med., 1885.	1885	1904
Hulsey, B. F., Roper Vanderbilt Univ., 1893.	1895	1900

WAYNE COUNTY SOCIETY.

President, J. D. Roberts, Mt. Olive Bellevue Med. Coll., 1875.	1877	1904
Secretary, W. K. Lane, Goldsboro Jeff. Med. Coll., 1902.	1902	1902
Hiatt, H. O., Wilmington	....	....
Faison, W. W., Goldsboro Jeff. Med. Coll., 1878.	1883	1904
Cobb, W. H. H., Goldsboro Jeff. Med. Coll., 1861.	1878	1878
Cobb, W. H., Jr., Goldsboro Jeff. Med. Coll., 1889.	1889	1890
Benton, Geo. R., Eureka Med. Coll. Va., 1901.	1901	1904
Powell, W. E., Eureka P. & S., Balto., 1882.	1885	1904
Kennedy, J. B., Goldsboro, R. F. D. Univ. Nashville, 1870.	....	1904
Exum, Wyatt P., Goldsboro, R. F. D. Med. Coll. Va., 1901.	1902	1904
Turlington, W. T., Fremont P. & S., Balto., 1894.	1894	1895
Hays, L. O., Fremont Univ. Coll. Med., Va.	1897	1904
Steele, W. C., Mt. Olive Univ. Md., 1894.	1891	1894
Sutton, W. G., Seven Springs Jeff. Med. Coll., 1889.	1889	1896

WILKES COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, F. H. Gilreath, North Wilkesboro..... Univ. Nashville, 1898.	1898	1898
Secretary, J. W. White, Wilkesboro..... Jeff. Coll., Phila., 1889.	1890	1890
Turner, J. M., Wilkesboro..... Univ. Louisville, Ky., 1881.	....	1904
Moseley, C. W., North Wilkesboro..... Balto. Med. Coll., 1893.	1893	1896
Myers, J. Q., North Wilkesboro..... N. C. Med. Coll., 1904.	1904	1904
Billings, A. E., North Wilkesboro..... N. C. Med. and Jeff. Phila., 1904, 1906.	1904	1906
Horton, W. P., North Wilkesboro..... Balto. Med. Coll., 1892.	1896	1904
Somers, L. P., Osbornville.....	....	1904
Eller, A. J., Ready Branch..... P. & S., Balto., 1893.	1895	1904
Pegram, R. W. S., Dellaplane.....	....	....

WILSON COUNTY SOCIETY.

President, B. S. Herring, Wilson..... Univ. Michigan.	1901	1901
Secretary, A. F. Williams, Wilson..... Univ. Md.	1901	1905
Anderson, Albert, Wilson..... Univ. Va.	1888	1889
Dickenson, E. T., Wilson..... Med. Coll. Va.	1895	1900
Moore, C. E., Wilson..... Bellevue College.	1875	1875
Anderson, W. S., Wilson..... Wash. Univ., Balto.	1867	1899
Anderson, W. H., Wilson..... Univ. Va.	1902	1905
Crocker, W. D., Lucama..... Louisville Med. Coll.	1887	1904
Crocker, S. H., Stantonsburg..... Ky. Sch. Med.	1894	1899
Lamm, I. W., Lucama..... Univ. Coll. Med.	1899	1900
Freeman, H. F., Lucama..... Coll. P. & S., Balto., 1878.	1879	1905
Moore, E. G., Elm City..... Univ. Med., 1883.	1883	1890
Harrison, J. S., Elm City.....	....	....
Barnes, B. F., Saratoga..... Univ. Md.	1902	1902

YADKIN COUNTY SOCIETY.

Members and Address.	*Licensed.*	*Joined State Society.*
President, T. R. Harding, Yadkinville..... P. & S., Balto., 1885.	1885	1906
Secretary, M. A. Royall, Yadkinville..... P. & S., Balto., 1885.	....	1904
Shore, T. W., Boonville..... Univ. Richmond, 1898.	1899	1904
Fassett, B. W., Courtney..... Balto. Med., 1898.	1899	1904
Holcomb, C. M., Chestnut Ridge..... P. & S., Balto., 1869.	....	1905
Blackwell, T. L., Boonville..... Louisville Med. Coll., 1874.	....	1905
Clingman, J. J., Huntsville..... P. & S., Balto., 1877.	1881	1904
Leak, W. G., East Bend..... N. C. Med., 1900.	1900	1904
Matthews, M. L., East Bend..... N. C. Univ., 1901.	1901	1904
Russell, S. L., Yadkinville..... Univ. Tenn., 1892.	1899	1904
Hutchens, E. M., Boonville..... N. C. Med. Coll.	1896	1904

YANCEY COUNTY SOCIETY.

President, ...	....	....
Secretary, J. B. Gibbs, Burnsville..... N. C. Med. Coll., 1904.	1904	1905
Edwards, C. P., Burnsville..... Tenn. Med. Coll., 1900.	1903	1903
Robertson, W. B., Burnsville..... Balto. Med. Coll., 1898.	1907	....
Ewing, J. B., Nicoville..... Independent Med. Coll.	1905	....
Peek, W. A., Bee Log..... Non-graduate.	1905	....
Fairchilds, J. M., Celo..... Non-graduate.	1905	....

Honorary Fellows, Medical Society of the State of North Carolina.

NAME.	ADDRESS.	NAME.	ADDRESS.
Peter E. Hines	Raleigh.	*George G. Thomas	Wilmington.
H. T. Bahnson	Salem.	*Francis Duffy	New Bern.
W. W. Lane	Wilmington.	P. L. Murphy	Morganton.
W. J. Love	Wilmington.	J. F. Shaffner	Salem.
James McKee	Raleigh.	B. P. Alston	Henderson.
Willis Alston	Littleton.	W. J. Jones	Goldsboro.
W. J. H. Bellamy	Wilmington.	F. J. Haywood	Raleigh.
W. I. Royster	Raleigh.	P. A. Barrier	Mount Pleasant.

Honorary Members, Medical Society of the State of North Carolina.

NAME.	ADDRESS.	NAME.	ADDRESS.
L. McL. Tiffany	Baltimore, Md.	W. L. Robinson	Danville, Va.
W. W. Keen	Philadelphia, Pa.	J. N. McCormack	Bowling Green, Ky.
*J. Allison Hodges	Richmond, Va.	*J. C. Walton	Danville, Va.
R. L. Payne	Norfolk, Va.		

May, 1907 Total membership Medical Society of the State of North Carolina including seven honorary members, 1,105. Of the 97 counties of the State the physicians of 91 counties are organized in county societies in affiliation with and component branches of the State Medical Society. At this date only the following four remain unorganized: Alleghany, Chowan, Jones and Tyrrell

Two hundred and seventeen members registered at 1907 session. This number does not include applicants for license, visitors, solicitors or other than enrolled members.

*Registered as present at Morehead City meeting, 1907.

Address of Dr. J. Howell Way.

Gentlemen of the Medical Society, Friends:

Language at my command in this hour of my promotion utterly fails to express my sincere appreciation of the distinguished honor you have just conferred in unanimously electing me to preside over the destinies of the Medical Society of the State of North Carolina during the ensuing year. And my embarrassment is only intensified when a conception appears before me of what it really means to be placed as the official head of the twelve hundred leading medical men of this grand old commonwealth; or when I recall the distinguished men who have preceded me in this chair.

The full significance of the honor of being your President is emphasized in reminding you of our earlier Presidents; eminent physicians and surgeons, the worthy leaders of a past generation of medical men, the far-seeing Edmund Strudwick, the talented N. J. Pittman, the much-loved Will George Thomas, the brilliant E. Burke Haywood, the accomplished Marcellus Whitehead, the learned Thos. F. Wood, our own Chas. J. O'Hagan, and others of like erudition and nobility of character whose lustrous fame is our most sacred heritage.

These honored names are forever engraved high in North Carolina's Hall of Medical Fame; and while apologizing, if need be, for mention of the living and present, in this connection, I may be permitted to say that high upon the same scroll, a later generation than ours, will read and revere the names of the kindly George Thomas, the genial Richard H. Lewis, the courtly Henry T. Bahnson, the loveable Joseph Graham, the tried and true friend W. H. H. Cobb, the skilled alienist Patrick L. Murphy, the student Francis Duffy, the careful and precise Knox, and Edward C. Register and Dave Tayloe, along with other honored men, who have stood at our helm.—My friends, when I view this roll of your past Presidents, I realize the greatness of the honor, and as well my utter inability to adequately express my appreciation.

When I recall my entrance into this body, a boy of barely twenty-one years, at the Charlotte Session of 1887, and the fact that from that year to the present I have been the constant recipient of responsibilities and honors without limit, at your gracious hands, and that to-day there comes to me by your favored partiality the greatest professional distinction within the power of the noble medical profession of our State to confer; I say, my friends, I wish I knew how to tell you that I thank you, that I appreciate it more than any order that could be conferred on me by potentate, prince, or king, and that I trust I may be enabled to so discharge its responsible duties as to requite in some slight degree the expression of your affection and confidence reposed this day in me. I thank you again, gentlemen, and bespeak from each of you your kindly support during my administration of your affairs as President of the Medical Society of North Carolina. I thank you.

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